UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 44

THE UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF TEXAS DALLAS DIVISION

STEPHEN McCOLLUM, et al.	§	
	§	
VS.	§	No. 3:12-CV-2037 L
	§	
BRAD LIVINGSTON, et al.	§	

MEDIATION AGREEMENT

After a mediation session on this date, the parties agreed that the Defendants will propose the following items to the Agency leadership:

- 1. The incoming non-medically assessed offenders whose self-assessment indicate a heat related risk will be placed upon a temporary wellness checklist, until medically evaluated with documentation.
- 2. Development of a training video on the identification of and response to, apparent heat related illness or injuries, in cooperation with appropriate medical experts.
- 3. Defendants will review the feasibility of respite areas for newly received offenders or previously identified offenders on the heat list along with development of appropriate documentation.
- 4. Identify offenders at risk of heat injury in a manner visible to all staff.
- 5. Develop a formal written policy for addressing excessive heat in prisoner housing areas.
- 6. For every prisoner death (whether at a prison or at a medical facility after transfer from the prison) where hyperthermia, heat, high temperatures or the heat index is a cause or contributing cause, the warden of the prison, the regional director overseeing the particular prison, the Correctional Institutions Division director, the Executive Director and the TDCJ Board shall be notified and provided a report.

It is further agreed that no aspect of Plaintiffs' case has been compromised or released in any fashion as a result of this agreement.

Defendants will report back to the Plaintiffs' counsel on the proposals within 120 days.

AGREED this 28th day of March, 2013.

DEFENDANTS:

PLAINTIFFS:

Name: Bruce Garcia, for all Defendants

Name: Jeff Edwards, for all Plaintiffs

Plaintiffs' MSJ Appx. 672

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 45

JAMES J. BALSAMO, JR.

HOME ADDRESS

BUSINESS ADDRESS

5108 Burke Drive Metairie, Louisiana 70003 (504) 889-2097 504-234-6968 **Tulane University Office of Environmental Health & Safety**

1430 Tulane Avenue, TW- 16 New Orleans, Louisiana 70112-2699 (504) 988-2872/ 988-5486 Fax- 504-988-5590

MILITARY STATUS

Honorable Discharge, United States Army Reserves November, 1974: Senior Medical Specialist; E-5

EDUCATION DEGREES

- M. H. A. Hospital Administration, Tulane University School of Public Health and Tropical Medicine, New Orleans, Louisiana. 1996
- M. P. H. Medical Care Administration, Tulane University School of Public Health and Tropical Medicine, New Orleans, Louisiana, 1973.
- M. S. Dairy Nutrition Research, Louisiana State University, Baton Rouge, Louisiana, 1969.
- B. S. Pre-Med, (Zoology) Louisiana State University, Baton Rouge, Louisiana, 1967.

LICENSES AND PROFESSIONAL CERTIFICATIONS

- *Registered Professional Sanitarian, State of Louisiana, License Number 443.
- *National Registered Professional Sanitarian, National Environmental Health Association, Reg. No.70007
- *Certified Occupational Hearing Conservationist, Certification Number 8990.
- *Certified Hazard Control Manager, Master Level, Registration Number 811.
- *Certified Healthcare Safety Professional, Executive Level, Certification Number 65.
- *Certified Hazardous Materials Manager, Master Level, Certification No. 591.
- *Certified Safety Professional, Comprehensive Practice (by Exam), Certification No. 7829.
- *Advanced Safety Certificate, National Safety Council, 1985.
- *Certified, AHERA: Inspector/Management Planner for Asbestos Abatement, State of Louisiana, Accreditation Number 4I111960 (Inspector), 4P111960 (Management Planner) 3-3-2014.
- *Certified Food Safety Professional, National Environmental Health Association, Cert. No. 171, 1999-2013
- *Food Safety Certification, State of Louisiana, Office of Public Health, Certification No. 2190, 1999-2004
- *Certified HACCP Manager, National Environmental Health Association, 6/23/2009-2014
- *Diplomate Laureate, American Academy of Sanitarians; Certificate No. 003; July, 2000

EXPERIENCE

2013-2014	Adjunct Professor of Public Health, Tulane University School of Public Health and Tropical Medicine., Dept. of Global Environmental Health Sciences, New Orleans, Louisiana.
1998-2012	Clinical Assistant Professor of Public Health, Tulane University School of Public Health and Tropical Medicine., Dept. Environmental Health Sciences, New Orleans, Louisiana.
1980-Present	Director, Office of Environmental Health and Safety, Tulane University; New Orleans, Louisiana.
1988-Present	Consultant, General Safety, Life Safety and Sanitation (Environmental Health) for Institutions, Nursing Homes, Hospitals, Psychiatric Hospitals, Prisons, Jails, Juvenile Detention Centers, Schools for Developmentally Disabled, Colleges, Universities, and Day Care Centers, Expert Witness.
1981-1998	Adjunct Instructor, Tulane University School of Public Health and Tropical Medicine, New Orleans, Louisiana.
1979-1980	Acting Director, Office of Environmental Health and Safety, Tulane University, New Orleans, Louisiana.
1973-1979	Assistant Environmental Health and Safety Officer, Tulane University, New Orleans, Louisiana.
1974-1980	Instructor, Environmental Health Department, Part Time, Delgado Junior College, New Orleans, Louisiana.
1971-1975	Weekend Drug Study Coordinator, Part-time, Tulane Medical School, New Orleans, La.
1970	Phlebotomist, Part Time, Allied Biological Blood Bank, New Orleans, Louisiana.
1972-1973	Deputy Director, Bureau of Personal Health Protection, Environmental Health Services, New Orleans Health Department; Registered Sanitarian.
1971-1972	New Orleans, Louisiana. Sanitarian Supervisor, Recreational and Institutional Environmental Health Programs, New Orleans Health Department, New Orleans, Louisiana.
1969-1971	Field Sanitarian, Food Control and General Sanitation, New Orleans Health Department, New Orleans, Louisiana.
1967	Laboratory Research Assistant, Louisiana State University, Department of Dairy Nutrition, Baton Rouge, Louisiana.

OFFICES, COMMITTEES, AND BOARD APPOINTMENTS

1976-1983 State of Louisiana, State Board of Examiners for Sanitarians,

Member and Chair

1971-Present Louisiana Environmental Health Association: Member.

1974, 1984 President

1982-83 Chair, Publicity Committee

1971& 72, 1982, Member, Constitution and By-Laws Committee (Chair 1995-2002)

1993-Present

1979 Member, Nominating Committee

1974, 1975, 1984 Official LEHA State Delegate to the Annual Educational

Conference & Meeting of the National Environmental Health Assn.

1979, 1983 Chair, Education and Information Committee

1971-73, 1982-1984, Member, Board of Directors

1992-2004, 2009-2014

1974 and 1984 Chair, Board of Directors

Mutual Aid Association of New Orleans: Member

1981-86 Chair, Communications Committee and Board Member

1984 President

1973-Present National Environmental Health Association (NEHA): Member

2007-2008 President of NEHA Past Presidents' Affiliate

2004-2005 President NEHA

2001-2004 2nd VP, 1st VP, and President-Elect.

1982, 1984, 1987 Member, Campus Communities Committee

1983, 1988-89 Chair, Campus Communities Committee 1986-1992 Member, Scholarship Committee 1993-Present Chair, Scholarship Committee

1994-2000 Chair, Institutional Environmental Health, Technical Section

Tulane University Medical Center Hospital and Clinic:

1977-1978 Member and Chair (1977), Safety Committee 1977-1982 Member, Infection Control Committee 1978 Member, Handicap Accessibility Committee

Tulane University:

2001-Present Member Tulane EH&S Policy Committee & Operations Committee

2003-2012 Member Tulane Emergency Operations Committee 2003-Present Tulane University Committee on Occupational Exposures

1979-80 Chair, Uptown Radioisotope and Radiation Safety Committee
1980-Present Member, University Radioisotope and Radiation Safety Committee

1984-2001 Member, University Hazardous Waste Committee

1989-1995 Chair, University Safety Committee

1979-Present Member, Institutional Bio-Safety Committee

1981-1985 <u>Louisiana Society for Risk Management (Formerly Healthcare</u>

Risk/Safety Management Association of New Orleans):

 1981-1985
 Member

 1981-82
 Secretary

 1983-84
 Vice-President

1983-87 City of New Orleans, Hazardous Materials Response Advisory

Committee

1999-2002 Local Emergency Planning Committee (LEPC) Healthcare Sub-

Committee.

1999-2008 Member- LEPC, City of New Orleans

Louisiana College and University Safety Association:

1984-1994&1997-Present Member

1985-1994 Secretary-Treasurer

1997-Present Treasurer

Louisiana Chapter of Certified Hazardous Materials Managers:

1992- 2005 Member, Charter (not active)

1993 Treasurer

1980-Present
1986

American Biological Safety Association, Charter Member
Member, Biological Safety Cabinet Certification Committee

1989 Co-Chairman 31st Biological Safety Conference, N.O., LA.

Member, Nominating Committee

1993 Chair, Nominating Committee

1991-94 Member, Long Range Planning Committee

1994-97 Councilor- Executive Council

1998-1999 Chair, Editorial Board, the Journal American Biological Safety

Association

2001 Chair, Local Arrangements Committee, 2001 ABSA Conference,

N.O.,LA.

Campus Safety, Health and Environmental Management Association:

1980-Present Member,

1991-93 Member, Scholarship Committee 1994-95 Chair, Scholarship Committee

1997-99 Member, Conference Planning Committee

1998 Chair, Host Committee: 45th International Conference on Campus Safety

1998-2001 Executive Committee, Member-at-Large

2002-2003 Nominating Committee

2008-2009 Member, Host Committee: 56th International Conf. on Campus

Safety

American Academy of Sanitarians:

1981-Present Diplomate- Member 2000-Present Diplomate Laureate

1994-2013	Board Member
1998-1999	Chair-Elect
1999- 2000	Chair
1998-2013	<u>Underwriters Laboratories-UL-2333-Technical Committee</u> for Infrared Thermometers Member: Chair, Steering Committee UL-2333
2004-2013	National Sanitation Foundation: Council of Public Health Consultants-Member Technical Committee on Biological Safety Cabinet-NSF Std. 49

MEMBERSHIPS (OTHER)

American Industrial Hygiene Association American Society for Hospital Engineering Deep South Health Physics Society

Louisiana Emergency Preparedness Association

Louisiana Public Health Association National Fire Protection Association

TEACHING EXPERIENCE

TEACHING	EXPERIENCE
1968	Basic Nutrition Laboratory, Teaching Assistant
	Louisiana State University Dairy Department, Baton Rouge, Louisiana
1971-73	Food Service Sanitation Training Courses
	City of New Orleans Health Department, New Orleans, Louisiana
1973-80	Institutional Environmental Health Lecturer
	Delgado Junior College, New Orleans, Louisiana
1973-80	Hospital Environmental Health and Safety Lecturer
	Delgado Junior College, New Orleans, Louisiana
1974-80	Environmental Monitoring, Instructor
	Delgado Junior College, New Orleans, Louisiana
1976-77	Peace Corp Sanitation/Environmental Health Training, Instructor
	Tulane University, New Orleans, Louisiana
1973-1985	Food Service Sanitation Training Course (Employees), Instructor, Tulane U.
1975, 78, 79	Introduction to Environmental Health Course, Instructor
1976-78	Institutional Environmental Health and Safety, Lecturer
	Delgado Junior College, New Orleans, Louisiana

- 1979-Present Institutional Environmental Health and Safety, Course Instructor
 Tulane University School of Public Health & Tropical Medicine
 New Orleans, Louisiana (Taught Course via Distance Learning Mode-1999)
- 1999-2007 Current Issues in Industrial Hygiene and Safety- Internet Based-Distance Learning Course Lecturer, Medical Waste and Domestic Chemical & Biological Terrorism, Tulane University, School of Public Health and Tropical Medicine.
- 2008-Present Current Issues in Industrial Hygiene and Safety, Internet Based Distance Learning Course Instructor -Tulane University, School of Public Health and Tropical Medicine. Domestic Chemical & Biological Terrorism, Disaster Management, Occupational Exposure Limits for Sensitizers, Safety Principles, etc., Tulane University, School of Public Health and Tropical Medicine.
- 1997-2000 Introduction to Environmental Health, Lecturer, Tulane University School of Public Health & Tropical Medicine, New Orleans, Louisiana
- 1976-1980 Food Service Sanitation Course, Instructor Delgado Junior College, New Orleans, Louisiana
- 1977-1978 Occupational Health Nursing Continuing Education Course, Instructor Tulane University, New Orleans, Louisiana
- 1976, 1977 OSHA Compliance Officer Training Course, Instructor Tulane University- New Orleans, Louisiana
- 1983, 1984 Environmental Health Sciences, Lecturer, Environmental Health Sciences Program, Louisiana State University, Baton Rouge, Louisiana
- 1982 Environmental Health in Developing Countries, Lecturer
 Tulane School of Public Health and Tropical Medicine, New Orleans, Louisiana

ACTIVITIES, 1968 TO PRESENT

- 1967-69 Dairy Nutrition Research Lab, Louisiana State University, Baton Rouge, Louisiana
 - Routine Nutritional Analyses of Food, Feeds, Milk, and Blood
 - Assisted with Departmental and Personal Nutrition Research Projects.
- 1969-73 New Orleans Health Department
 - Solid Waste Activities
 - Housing Inspections
 - Swimming Pool Inspections
 - Food Sanitation Inspections
 - Plans Review of New and Renovated Facilities
 - Insect and Rodent Control
 - Individual Sewage Disposal Systems
 - Training Courses and Seminars
 - Institutional Environmental Health Inspections
 - Program Planning and Evaluation
 - Toxic Substances Activities

- Accident Prevention Activities
- Recreational Environmental Health Inspections
- Personnel Supervision and Evaluation
- 1970 Allied Biologicals, Blood & Plasmapheresis Ctr. (Part Time), New Orleans, LA.
 - Performed Phlebotomies
 - Performed Physical Examinations on Donors
 - Separation and Preparation of Plasma from Whole Blood
- 1971-75 Tulane Univ. Medical School, Dept. of Medicine (Part Time), New Orleans, LA.
 - Blood Drawing, Administering EKGs, and monitoring of Human Donors for adverse effects, drug safety, and/or dose effectiveness after being given experimental drugs. Coordination of Drug Studies
- 1974-1980 Delgado Junior College, Department of Environmental Health (Part Time), New Orleans, Louisiana
 - Environmental Monitoring Course
 - Institutional Environmental Health Lectures
 - General Environmental Health Course
 - Food Service Sanitation Course
- 1973-Present Tulane University, Office of Environmental Health & Safety, New Orleans, LA.
 - Inspection of Food Facilities
 - Fire Safety Inspections
 - OSHA Safety Inspections
 - Review Plans for New Facilities, New Structures \Renovation Projects
 - Epidemiological Investigations
 - Radiological Health Functions
 - Industrial Hygiene Activities
 - Radiological and Hazardous Waste Disposal

Tulane University Cont'd.

- Consultation on all matters affecting Health & Safety at Tulane University
- General Sanitation and Waste Disposal Activities
- Institutional Environmental Health and Safety Course, Lecturer and Instructor, Tulane University School of Public Health and Tropical Medicine
- Lecturer in Introduction to Environmental Health Course, and Current Topics in Environmental Health Sciences, Tulane University School of Public Health and Tropical Medicine
- In-Service Seminars in Fire, Hurricane Disaster Planning and General Safety, Tulane University Medical Center Hospital and Clinic
- Committee Membership, Bio-Safety, Radioisotope/Radiation Safety, University EH&S Operations Committee and Policy Committee

- University Safety Committee & Committee on Occupational Exposures.
- Environmental Health and Safety Program Planning, Budget Preparation, Office and Staff Management.
- Directed Tulane Occupational Health and Safety Consulting Services.

These activities involve the Tulane University Health Sciences Center, Tulane University Main Campus, Tulane National Primate Research Center, F. Edward Hebert Center, and (1976-2001)Tulane University Medical Center Hospital and Clinic.

1988-PRESENT- Consultant in Institutional Environmental Health and Safety for Prisons, Jails, Juvenile Detention Centers, Psychiatric Hospitals, Schools for The Developmentally Disabled, Schools and Universities. Expert Witness. Qualified in Federal Court, States of Oklahoma, Mississippi, Texas and U.S. Virgin Islands.

PUBLICATIONS

- J. F. Beatty, J. D. Roussell, J. A. Lee, L. L. Rusoff, and J. J. Balsamo, Jr., "Effect of Vitamin A Supplement on Physiological Responses to Thermal Stress of Holstein Steers," Southern Agricultural Workers, Journal of Dairy Science, April 1969.
- J. T. Weng, R. A. Smith, J. J. Balsamo, J. M. Gooding, R. R. Kirby, "A Method of Scavenging Waste Gases from the Jackson-Rees System." Anesthesiology Review. VII: 35-58, 1980.
- J. J. Balsamo, H. G. Scott, "The Urban Scene New Orleans," Journal of Environmental Health. V.44(3):108-114, 1981.
- P. Mayeux, L. Dupepe, K. Dunn, J. J. Balsamo, J. Domer, "Massive Fungal Contamination in Animal Care Facilities Traced to Bedding Supply." Journal of Applied and Environmental Microbiology, Vol. 61, No. 6, pp. 2297-2301, June 1995.
- J.J. Balsamo, Jr., R.W. Powitz, Tools for Environmental Health Professionals, J. Environmental Health, 59:No. 8, 1997----66:No 4, 2003

PROCEEDINGS

- J. J. Balsamo, "Role of a Safety Professional on the Occupational Health Team."

 Occupational Health Nursing, edited by E. Treuting, pp. 9-14. New Orleans, 1979.
- J. J. Balsamo, "Chloroform." Occupational Health Nursing, edited by E. Treuting, pp. 79-78. New Orleans, 1979.
- J. J. Balsamo, "Lighting." Occupational Health Nursing, edited by E. Treuting, pp 79-86. New Orleans, 1979.

- J. J. Balsamo, "Ergonomics." Occupational Health Nursing, edited by E. Treuting, pp. 87-93. New Orleans, 1979.
- J. J. Balsamo, "Lead." Occupational Health Nursing, edited by E. Treuting, pp. 95-103. New Orleans, 1979.

PRESENTATIONS

- James J. Balsamo, Jr., "Hazardous Material: Lead," Southeastern Council of the National Association of Housing and Redevelopment Officials, July 16, 1991, New Orleans, LA.
- James J. Balsamo, Jr., "Concurrent Asbestos and Lead Abatement," National Environmental Health Association 56th Educational Conference, June, 1992, Winnipeg, Canada.
- James J. Balsamo, Jr., and Robert Powitz, "Environmental Health and Safety Instrumentation Workshop," National Environmental Health Association 53rd Education Conference, June 25, 1989, Seattle, Washington, and the 55th Educational Conference, June 23, 1991, Portland, Oregon.
- James J. Balsamo, Jr., "Hospital Fire Safety," National Fire Protection Association Annual Educational Conference, May, 1992, New Orleans, Louisiana.
- James J. Balsamo, Jr., "Lead Paint Removal from a Day Care Center on a University Campus," 40th International Conference of The Campus Safety Association, July 11-16, 1993, Bellingham, WA.
- James J. Balsamo, Jr., and Robert Powitz, "Instruments to Enhance Environmental Health Performance: Environmental Audits and Assessments," The Thirty-Fifth Navy Occupational Health and Preventive Medicine Workshop, Feb. 26-27, 1994, Virginia Beach, Virginia.
- James J. Balsamo, Jr., "Solving a Massive Fungal Contamination Problem in Animal Facilities," 42nd International Conference of The Campus Safety Association, July 9-14, 1995, Honolulu, Hawaii.
- James J. Balsamo, Jr., The Art of Preparing Written Reports, Presentations and Other Products, and Affordable Tools for the Consulting Sanitarian, National Environmental Health Association, 60th Annual Education Confer. July 1, 1996, Chicago, Ill. and 63rd Annual Education Confer., July 7,1999,Nashville,TN.
- James J. Balsamo, Jr. and Robert W. Powitz., Tools for Environmental Health Professionals Workshop, Feb.10, 2000, Alaska Environmental Health Association's Educational Conference in Anchorage, Alaska., and January 29, 2002, Louisiana Environmental Health Association, Annual Educational Conference.

"Thanks Osama- Environmental Health Awakening," Keynote Presentation at the 2002 Texas Environmental Health Assn. Educational Conference, Fort Worth, Texas: March, 23, 2002

"Bio-Terrorism Initiatives of the National Environmental Health Association," Keynote at Yankee Environmental Health Conference in Plymouth, Mass., January, 2004.

"Update on National Environmental Health Association Professional Activities," Louisiana Environmental Health Association Educational Conference, Jan. 27, 2005.

"Partnering for Success by The National Environmental Health Association," Banquet Keynote at New Jersey Environmental Health Association Annual Educational Conference., Atlantic City, New Jersey, March 8, 2005.

"What NEHA Can Do for You," Keynote at the Idaho Environmental Health Association Educational Conference, Boise, Idaho, March 23, 2005.

"Institutional Housing from a Public Health Perspective," California Environmental Health Association Educational Conference, Monterey, CA., April 26, 2005.

"Role of The Tulane University Office of Environmental Health and Safety in the University's Preparation for and Recovery from Hurricane Katrina" Presented at The Campus Safety, Health and Environmental Management Association Annual Educational Conference, Anaheim, CA., July 17, 2006

"The Role of Local Health Department Sanitarians in Natural Disasters and Terrorism Events." Louisiana State Dept. of Health & Hospital, Sanitarian Services Educational Meeting. Baton Rouge, LA. November 1, 2006.

James J. Balsamo, Jr. and Robert W. Powitz., Tools for Environmental Health Professionals Workshop, Feb.10, 2000, Alaska Environmental Health Association's Educational Conference in Anchorage, Alaska., and January 29, 2002, Louisiana Environmental Health Association, Annual Educational Conference.

"Instrumentation Workshop for Food Service Inspections," Presented by R.W. Powitz, Ph.D. R.S., DLAAS, and J. J. Balsamo, Jr., MS, MPH, MHA, R.S., CSP, DLAAS. "National Environmental Health Association 71st Annual Educational Conference," Atlantic City, N.J., June 17-21, 2007. HONORS AND AWARDS:

Certificate of Merit, National Environmental Health Association as "Outstanding Sanitarian in Louisiana for 1975."

"Outstanding Contributions Award," Louisiana Environmental Health Assn. for 1978-79.

"Diplomate," American Academy of Sanitarians, Awarded June 5, 1981.

Member, ETA Chapter Delta Omega, National Honorary Society in Public Health 1984-85.

"Outstanding Registered Sanitarian," Louisiana Environmental Health Association 1984-85.

"President's Award," Louisiana Environmental Health Association, 1974 & 1984-85.

"Certificate of Merit," National Environmental Health Association, 1985 and 1992.

"Certificate of Merit," Mayor's Office, City of New Orleans, 1985.

"Certificate of Appreciation," American Biological Safety Association, 29th Biological Safety Conference, October 5-9, 1986.

- "Certificate of Appreciation," American Academy of Sanitarians, June, 1998
- "Certificate of Appreciation," National Environmental Health Assn.,1988,1992,1998,2000& 2002.

Who's Who in the Safety Profession, National Security Institute, 1990-91.

Who's Who, Environmental Registry, Citation's, 1992.

- "Certificate of Merit," Campus Safety Association, 1995.
- "Award of Appreciation,' The National Environmental Health Association, 1995, 1996, 1997, 1998, and 1999.
- 'Certificate of Appreciation,' Campus Safety, Health and Environmental Management Assn., 1996, 1998, 2000 and 2006.
- "Certificate of Appreciation," Louisiana Chapter-Certified Hazardous Materials Managers8/23/96.
- "Outstanding Environmental Professional," Louisiana Environmental Health Assn, 2000-2001.
- "Diplomate Laureate," July, 2000, American Academy of Sanitarians.

Journal Technical Editor's Award; National Environmental Health Association, 2000.

The Davis Calvin Wagner Award, July, 2001, American Academy of Sanitarians.

- "The Past-President Pin," National Environmental Health Association, June 29, 2005.
- "Certificate of Appreciation" Campus Safety, Health and Environmental Management Association, July 15, 2006
- "Walter F. Snyder Award" presented by The National Sanitation Foundation, International and the National Environmental Health Association, May, 2010

SPECIAL COURSES AND EDUCATIONAL CONFERENCES ATTENDED:

- "Organizational Development," H. E. W., Public Health Service Training Institute of the Environmental Control Administration, New Orleans, Louisiana, January 18-22, 1971.
- "Environmental Science," H. E. W., Department of Environmental Health, U. S. Public Health Service Hospital, New Orleans, Louisiana, June 3-22, 1971.
- "Investigation of a Foodborne Disease Outbreak," Center for Disease Control, New Orleans, Louisiana, May 29-June 1, 1972.
- "Occupational Health, Safety and Industrial Hygiene Workshop," Department of the Navy, New Orleans, Louisiana, September 30-October 4, 1974.

Seminar on Injury Control and Consumer Product Safety, National Environmental Health Association, Minneapolis, Minnesota, July 1, 1975.

- "Basic Course in Health Physics," Louisiana State University Nuclear Science Center, Louisiana State University, Baton Rouge, Louisiana, December 13-17, 1976.
- "Biohazard and Injury Control in the Biomedical Laboratory," National Cancer Institute, University of Minnesota School of Public Health, Birmingham, Alabama, November 1-3, 1977.
- "Basic Hospital Safety Course, "September 12-17, 1977 and ."Advanced Hospital Safety Course," July 5-7, 1978, Central Florida Safety Council, National Safety Council, Orlando, Florida,
- "Hospital Safety Clinic," Joint Commission on Accreditation of Hospitals, Arkansas Hospital Association, Little Rock, Arkansas, December 12, 1978.

- "OSHA Short Course on Laboratory Safety," U. S. Department of Labor, OSHA Training Institutes, Auburn, Alabama, June 25-27, 1980.
- "Control of Biohazards in the Research Laboratory," National Institutes of Health, National Cancer Institute, Johns Hopkins Hospital, Baltimore, Maryland, August 10-22, 1980.
- "Hospital Safety Workshop," Southern Baptist Hospital, Joint Commission on Accreditation of Hospitals, New Orleans, Louisiana, February 25, 1982.
- "Occupational Health Symposium," Deep South Section, American Industrial Hygiene Association, Baton Rouge, Louisiana, May 19, 1982.
- "Life Safety Code Seminar," National Fire Protection Association, Baton Rouge, Louisiana, May 24-27, 1982.
- "Bomb Threat and Disaster Drill Workshop," Southern Baptist Hospital, New Orleans, Louisiana, February 17, 1983.
- Asbestos, "The Workplace, Buildings and Schools: Risk Assessment and Management," Johns Hopkins School of Public Health, Baltimore, Maryland, April 25, 1984.
- "Safety Management Techniques," National Safety Council, New Orleans, Louisiana, June 17-19, 1985.
- "Indoor Air Quality," Air Pollution Control Association, New Orleans, Louisiana, Jan., 29, 1986.
- "Fire Safety in Facilities Housing the Elderly," National Fire Protection Association Seminar, New Orleans, Louisiana, May 13, 1986.
- "Health Law Symposium," Louisiana Hospital Association, New Orleans, Louisiana, November 7-10, 1989.
- "AHERA: Inspector/Management Planner Refresher Course," Tulane University Medical Center, New Orleans, Louisiana, 1990 1995.
- "OSHA's Trenching and Excavation Seminar," Metropolitan Safety Council, New Orleans, Louisiana, May 9, 1990.
- "Industrial Hygiene Review," Midwest Center for Occupational Health and Safety, St. Paul, Minnesota, August 5-9, 1991.
- "OSHA Compliance in Louisiana," National Business Institute, New Orleans, Louisiana, September 6, 1991.
- "Tackling Environmental Issues in Louisiana," Cambridge Institute, New Orleans, La., September 18, 1992.

Campus Compliance Hazardous Materials Workshop," Oak Ridge Associated Universities, Georgia Institute of Technology, Atlanta, Georgia, October 1-2, 1992.

Louisiana Emergency Preparedness Association, HazMat Training, Kenner, LA., June 20, 1992.

"Bioaerosols and Indoor Air," American Biological Safety Conference, San Francisco, California, October 24, 1992.

"American with Disabilities Act," Metropolitan Safety Council, New Orleans, LA, March 31, 1992.

"Industrial Hearing Continuing Certification Course," Council for Accreditation in Occupational Hearing Conservation, Covington, Louisiana, March 12, 1993-2002.

"Eight Hour Lead Residue and Lead Based Paint Hazard Identification and Abatement Course," Wynn L. White Consulting Engineers, Inc., Baton Rouge, Louisiana, July 29, 1993.

"OSHA Compliance Update in Louisiana," National Business Institute, New Orleans, La., July 14, 1994.

"Bloodborne Pathogen Protection Seminar," Metropolitan Safety Council, New Orleans, Louisiana, 1994.

"Industrial Hygiene Seminar," Metropolitan Safety Council, New Orleans, Louisiana, 1994.

"EH&S Professional and the Laboratory Design Process," Pre-Conference Professional Development Course, American Biological Safety Assn., Williamsburg, VA., October 23, 1994.

"The 59th Annual Educational Conference," National Environmental Health Association, Denver, Colorado, June 11-29, 1995.

"Health Risk Communication Workshop for Environmental Health Professionals." National Environmental Health Association, Chicago, Ill., June 28, 1996.

Introduction Into ISO 14000, Environmental Management System Standards, Competitive Edge Environmental Management Systems, Inc. New Orleans, LA., August 19, 1996.

Advanced Workers= Compensation In Louisiana Seminar, National Business Institute, Inc., New Orleans, Louisiana. October 11, 1996.

61st Annual Educational Conference, National Environmental Health Association, Washington, DC, June 28-July 2, 1997

40th Annual Biological Safety Conference, and Bioaerosols Seminar, American Biological Safety Association, La Jolla, CA., October 19-22, 1997

Indoor Air Quality Investigations Seminar, Jerry Tulis, Ph.D., New Orleans, LA., July 23, 1998

Train-the-Trainer Emergency Responder Nuclear, Biological, and Chemical Responder Awareness Level Training--8/4/98 Technician - Hospital Provider Course--8/6/98 Operations Level Training--8/5/98 Sponsored by The U.S. National Domestic Preparedness Program, New Orleans, LA.

Gene Therapy, and Ventilation Basics, 41st Annual Biological Safety Conference; American Biological Safety Association, Lake Buena Vista, Florida, October 25-28, 1998

RMD's LPA-1 Lead Paint Inspection System Training Course; Jacob Paster, RMD,Inc., New Orleans, LA. April 21, 1999

Domestic Terrorism: Local Preparation for Chemical and Biological Events, National Environmental Health Association, 63rd Annual Educational Conference, Nashville, Tennessee. July 6-9, 1999

Certified Food Safety Professional Examination Review Course, National Environmental Health Association, Nashville, Tennessee. July 5, 1999

Domestic Preparedness Measured Response Biological Terrorism Tabletop Exercise. Office of Emergency Preparedness: Domestic Preparedness Program., July 27, 1999., New Orleans, LA.

24 Hour Hazmat Operations Level Training, New Orleans Municipal Training Academy, New Orleans, LA., Sept., 13,14,15, 1999.

Biological Warfare and Terrorism: The Military and Public Health Response Satellite Broadcast; U.S. Army Medical Research Institute of Infectious Diseases and Centers for Disease Control and Prevention, V.A. Hospital, New Orleans, LA., September 21, 22, 23, 1999.

42 Annual Biological Safety Conference, American Biological Safety Association, St. Louis, MO., October 16-19, 1999.

Louisiana Environmental Health Association Annual Educational Conference, Lafayette, LA., January 27, 2000.

Alaska Forum on the Environment-2000, Alaska Environmental Health Association Educational Conference, Anchorage, Alaska, February 8-10, 2000.

EPA Region 3 Seminar-EPA University Initiative, Johns Hopkin Univer., Baltimore, MD. 5-1-2000

Weapons of Mass Destruction, Incident Management/Unified Command, U.S. Dept. of Justice; Texas A&M National Emergency Response & Rescue Training Center (NERRTC), New Orleans, LA, May 15-19, 2000.

Domestic Terrorism: Local Preparation for Chemical and Biological Events, NEHA Workshop, June 18 & 19, 2000. NEHA 64th Annual Educational Conference, June 15-19, 2002; Denver, CO

International Conference on CampusSafety, Campus Safety, Health and Environmental Management Association, Stanford University, California; July 15-19, 2000.

Environmental Health and Safety Professionals and the Law, Robert Clifford and William Collier, CSHEMA; Stanford, California, July 20, 2000.

AHERA Asbestos Inspector and Management Planner Refresher Course, Louisiana State University, Baton Rouge, LA., August 16, 2000.

Biological Warfare and Terrorism, Medical Issues and Response, Satellite Broadcast by U.S. Army Medical Research Institute of Infectious Diseases, New Orleans, Louisiana; September 26, 27, & 28, 2000.

Human Gene Therapy: Molecular Biology and Viral Vectors; Human Gene Transfer Clinical Trials; and Infection Control, Three (3) Seminars presented by The American Biological Safety Association, Washington, DC; October 21 & 22, 2000

The 54th Louisiana Environmental Health Association- Annual Educational Conference, New Orleans, Louisiana, January 31 B February 1, 2001

Food Safety Workshop, Texas Environmental Health Association; El Paso, Texas; March 24, 2001

National Environmental Health Association's 65th Annual Educational Conference, Atlanta, Georgia, July 1-3, 2001.

48th International Conference on Campus Safety, Campus Safety, Health and Environmental Management Association, Texas A&M University, July 9-11, 2001.

AHERA Asbestos Inspector and Management Planner Refresher Course, ASCI, Ken Talbot, Baton Rouge, LA., December 6, 2001.

Food Bio-Security Symposium, Association of Food and Drug Officials; New Orleans, LA. March 27, 2002.

RMD's LPA-1 Lead Paint Inspection System Training Course; Jacob Paster, RMD,Inc., New Orleans, LA. May 1, 2002.

Industrial Hearing Conservationist Training Course, Dr. Michael F. Seidemann, Ph.D., Kenner, Louisiana; May 22, 2002.

National Environmental Health Association's 66th Annual Educational Conference, Minneapolis, Minn., June 29-July 3, 2002.

49th International Conference on Campus Safety, Campus Safety, Health and Environmental Management Association, Toronto, Canada; July 13 -18, 2002.

45th Annual Biological Safety Conference, October 19-23, 2002 and two, 4 hour seminars Effective Bio-Safety Committee and Advanced Lab Design and Ventilation, Presented by The American Biological Safety Association., October 19 and 20, 2002.

Surveillance and Reporting of Infectious Diseases for ICP and Laboratorians National Laboratory Training Network, CDC, October 25, 2002.

National Environmental Health Association's 67th Annual Educational Conference, Reno, NV., June 6-11, 2003.

50th International Conference on Campus Safety, Campus Safety, Health and Environmental Management Association, Vanderbilt University, July 11- 18, 2003

Counter Terrorism Awareness and Operational Security Course Tulane Disaster Response Training Center., New Orleans, La., April 15, 2004.

Epi-Ready Foodborne Illness Response Strategies Workshop, National Environmental Health Association, Anchorage, Alaska, May 6, 2004.

National Environmental Health Association's 68th Annual Educational Conference, Anchorage, Alaska, May 8-12, 2004.

Biosafety Level 3: Facility Design and Laboratory Operations. American Biological Safety Association Summer Course. Chicago, IL.,(16 hrs.) June 21 & 22, 2004.

Surviving Select Agent Inspections. American Biological Safety Association, Chicago, IL., (4 hrs), June 23, 2004.

Certified Workers, "Compensation Professional Program-Principles of Workers' Compensation." Louisiana Association of Self-Insured Employers. Baton Rouge, LA., July 28, 2004.

Campus Public Safety Response to Weapons of Mass Destruction (WMD) Incidents. LSU National Center for Biomedical Research and Training and International Association of Campus Law Enforcement Administrators. New Orleans, LA., July 29, 2004.

Chartered Institute of Environmental Health Conference and Exhibition 2004," Torquay, England. September 14-16, 2004.

"Louisiana Environmental Health Association Annual Educational Conference," St. Francisville, LA., Jan. 25-27, 2005.

"New Jersey Environmental Health Association Educational Conference" Atlantic City, New Jersey, March 8 and 9, 2005.

- "Idaho Environmental Health Association Annual Educational Conference" Boise, Idaho, March 23 and 24, 2005.
- "IBC Bio-Safety\Bio-Security Seminar" Barbara A. Ellis, Ph.D., CDC Select Agent Program , Tulane University, New Orleans, LA., April 8, 2005.
- "Council of Public Health Consultants' Orientation," National Sanitation Foundation, Ann Arbor, Michigan, April 13, 2005.
- "California Environmental Health Association Annual Educational Conference," Monterey, CA., April 26 and 27, 2005.
- "Haz Mat Training-Core Disaster Life Support," Louisiana Office of Emergency Preparedness, Louisiana Office of Homeland Security & Emergency Preparedness Annual Conference, New Orleans, LA., June 3, 2005.
- "Responding To Emergencies in Biological Laboratories," American Biological Safety Association Summer Series, Albuquerque, New Mexico, June 6, 2005.
- "Principles of Laboratory Biosecurity Course," American Biological Safety Association Summer Series, Albuquerque, New Mexico, June 7, 2005.
- "Asbestos Management Planner /Inspector Refresher Course," Division of Continuing Education, Louisiana State University, Baton Rouge, LA., June 9, 2005.
- "American Society of Safety Engineers, Safety 2005 Professional Development Conference and Exposition." New Orleans, LA., June 13-15, 2005
- "National Environmental Health Association 69th Annual Educational Conference," Providence, R.I., June 25-29, 2005.
- "Campus Safety, Health and Environmental Management Association's Annual Educational Conference", Philadelphia, Pennsylvania., July 11-16, 2005
- "National Environmental Health Association 70th Annual Educational Conference," San Antonio, TX., June 25-28, 2006.
- "Campus Safety, Health and Environmental Management Association's Annual Educational Conference", Anaheim, CA., July 15-19, 2006
- Louisiana State Dept. of Health & Hospital, Sanitarian Services Educational Meeting. Baton Rouge, LA. November 1 & 2, 2006.
- "Louisiana Environmental Health Association Annual Educational Conference," Baton Rouge, LA., April 5, 2007

"National Environmental Health Association 71st Annual Educational Conference," Atlantic City, N.J., June 17-21, 2007.

"Campus Safety, Health and Environmental Management Association's Annual Educational Conference", Boston, Mass., July 22-26, 2007.

Counter Terrorism Awareness and Operational Security Course Presented by University of West Virginia, Homeland Security Training Program at the University of New Orleans, New Orleans, LA., August 30, 2007.

"Department of Homeland Security Webcast on The Chemical Security Act," Presented by the National Association of Colleges & Universities Business Officers and the Campus Safety, Health, and Environmental Management Association, November 29, 2007.

"AHERA Asbestos Management Planner/ Inspector Refresher Course," Presented by ACSI, Baton Rouge, LA., December 7, 2007.

"National Environmental Health Association 72nd Annual Educational Conference," Tuscon, Arizona., June 22-25, 2008.

"Campus Safety, Health and Environmental Management Association's Annual Educational Conference", St. Louis, Missouri, July 26-30, 2008.

"National Environmental Health Association 73nd Annual Educational Conference," Atlanta, Georgia., June 21-24, 2009.

HACCCP Manager Certification Course, NEHA 2009 Professional Development Seminars, Atlanta, Georgia, 8 hours; June 20, 2009.

"Campus Safety, Health and Environmental Management Association's 56th Annual Educational Conference," New Orleans, LA. July 11-15, 2009.

"AHERA Asbestos Management Planner/ Inspector Refresher Course," Presented by LSU School of Continuing Education, Baton Rouge, LA., June 2, 2010.

"National Environmental Health Association 74th Annual Educational Conference," Albuquerque, New Mexico., June 5-9, 2010.

"Campus Safety, Health and Environmental Management Association's 57th Annual Educational Conference," Baltimore, MD., July 18-21, 2010.

"Creating a New Research Building: The Role of EHS in Obtaining Optimal Outcome," Professional Development Seminar, Presented by the Campus Safety, Health & Environmental Management Association (CSHEMA), Baltimore, Maryland. 4 hours; July 17, 2010.

"Auditing and Inspections: A Management Systems Approach," Professional Development Seminar, Presented by the Campus Safety, Health and Environmental Management Association (CSHEMA), Baltimore, Maryland. 4 hours; July 18, 2010.

"National Environmental Health Association 75th Annual Educational Conference," Columbus, Ohio, June 17-20, 2011. 16.5 Contact hours.

"Essentials of Industrial Hygiene Sampling for the Environmental Health Practitioner," Professional Development Seminar Presented by the National Environmental Health Association (NEHA), Columbus, Ohio. 8 Contact hours., June 17, 2011.

"National Environmental Health Association 76th Annual Educational Conference," San Diego, CA., June 26-30, 2012. 18.5 Contact Hours.

"National Environmental Health Association" San Diego, CA., Professional Development Workshop: "Commercial Cooking Ventilation Requirements" 4 Contact hrs. June 27. 2012.

"Campus Safety, Health and Environmental Management Association's 59th Annual Educational Conference," Portland, Oregon, July 14 – 18, 2012.

"Campus Safety, Health and Environmental Management Association- Professional Development Workshop. "OSHA From The University Viewpoint" Portland, OR., July 14, 2012. 4 Contact hrs.

"Campus Safety, Health and Environmental Management Association- Professional Development Workshop. "Laser Safety 101 Training Course" Portland, OR., July 14, 2012. 4 contact hrs.

Louisiana Environmental Health Association Annual Educational Conference, Baton Rouge, LA., March, 14, 2013 6 contact hrs.

National Environmental Health Association 77th Annual Educational Conference, Washington, D.C., CA., July 9-12, 2013. 18.0 Contact Hours.

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 46

Report of Review of Other Documents, Inspections (9/26/2012) and Research

Related to Civil Action No. 3:12-cv-02037; Stephen McCollum, Stephanie Kingrey, and Sandra McCollum, individually and as heirs at law to the Estate of Larry Gene McCollum, Plaintiffs

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Brad Livingston, Jeff Pringle, and the Texas Department of Criminal Justice, Defendants

prepared by

James J. Balsamo, JR., Environmental Health and Safety Consultant\Expert

MS, MPH, MHA, R.S., CSP, CHMM, CHSP, CP-FS, COHC, DLAAS

for

Scott Medlock, Director Prisoner's Rights Program, Texas Civil
Rights Project

1405 Montopllis Dr.

Austin, Texas 78741

Report Date: 12/20/2013

James J. Balsamo, Jr., MS, MPH, MHA, R.S., CSP, CHMM, DLAAS Date

Janer J. Balsans, Jr.

Introduction

I have been retained as a private consultant\expert by the Texas Civil Rights Project, Prisoner's Right Program in Austin, Texas to review documents, inspect the site, and make observations of my findings relative to the conditions of confinement in the area of environmental health and safety conditions at the Hutchins Texas State Jail in Dallas, Texas during the time of incarceration of Larry Gene McCollum, at that facility (prison) especially during the dates of July 18, 2011 through July 28, 2011. He passed away in the hospital on July 28, 2011 after having what was termed as a "seizure" (later determined to be a heat stroke) in Hutchins on July 22, 2011. He was incarcerated in Hutchins in various buildings such as Unit-C4-1 and Unit C6- 34 bunk. He was then transferred to Unit C7-46 bunk where it was reported that he remained there for the rest of his stay. From my review, I was asked to opine as to my findings as it related to the subjects of concern noted above.

My on-site review at the Hutchins facility was carried out on September 26, 2012 and my review of documentation continues through this report date. The historical heat temperature and humidity data that I reviewed covered the period of time from July 7 through July 31, 2011 which includes the dates Mr. McCollum was at the Hutchins facility.

I reviewed interrogatory associated responses, administrative directives, policies and procedures, grievances and other documents that were produced in response to the request for production of documents by The Texas Department of Criminal Justice, TDCJ, as well as environmental data that I obtained from instruments I used on my visit to the Hutchins Facility on September 26, 2012 and other historical environmental (climate) data obtained from reporting stations of the U.S. Government in a station in Dallas, Texas for the period July 7, 2011 to July 31, 2011. Also temperature and humidity logs ostensibly recorded in the Hutchins Facility, TDCJ, covering the period of May 1, 2011 through July 31, 2011 as provided to me by the Texas Civil Rights Project, Prisoner Rights Program attorneys were used in my review of the temperature conditions at this facility. I used references such as Table 3 of the ANSI/ASHRAE 55-1992 Standard, Thermal Environmental Conditions for Human Occupancy, NOAA'S National Weather Service Heat Index, U.S. Government collected climatological data obtained through the Weather Warehouse, Weather Source, LLC, of Amesbury, Massachusetts, American Correctional Association, Adult Correctional Institutions Standards, Fourth Edition and an American Housing Survey for the United States – 2009, USDHUD, HI 50/09, 3/20/2011.

My findings are herein limited to the following issues: Heat Related Standards, Heat Index Chart, Description of Housing and Ventilation at Hutchins, Temperature, Humidity and Heat Index, Heat Related Illnesses and Precautionary Measures.

Standards for Adult Correctional Institutions, 4th Edition and Other Pertinent Standards and Reports

- 1. American Correctional Association (ACA) Standard 4-4153, "Heating and Cooling" states that temperatures in indoor living and work areas are (to be) appropriate to the summer and winter comfort zones. Comments from the standard indicate that temperature and humidity should be capable of being mechanically raised or lowered to an acceptable comfort level.
- 2. The ACA Standard 4-4152 states that air circulation should be at least 10 cubic feet of fresh or recirculated filtered air per minute per occupant for inmate rooms/cells in existing facilities.
- 3. The ANSI/ASHRAE Standard 55-1992, Thermal Environmental Conditions for Human Occupancy, Table 3 sets as its Operative Temperature Range for the summer with minimal type clothing even less than light slacks and short sleeve shirt, (i.e., briefs and t-shirt), 79-84 degrees Fahrenheit. Other than clothing there are no adjustments for season or sex to temperatures in Table 3 referenced above.
- 4. HEAT INDEX: The NOAA Weather Heat Index (HI) is the temperature the body feels when heat and humidity are combined. Human bodies dissipate heat by varying the rate and depth of blood circulation, by losing water through the skin and the sweat glands, and lastly by panting, when blood is heated above 98.6 degrees Fahrenheit. Sweating cools the body through evaporation as stated earlier, however high relative humidity retards evaporation, and the body can't (or not efficiently) get rid of its heat. When heat gain by the body exceeds the level the body can remove, body temperature begins to rise and heat related illnesses and disorders can begin to occur. The Heat Index is based on temperature in the shade. Exposure to direct sunlight can increase the HI by up to 15 degrees Fahrenheit. The Heat Index (HI) provides, in an organized manner, what types of heat problems may occur and the relative chances of incurring such a problem. This is based on the increasing HI which was obtained from the National Weather Service Weather Forecast Office in Pueblo, Colorado.

http://www.crh.noaa.gov/pub/heat.php

www.wikipedia.org/wiki/heat index

HEAT INDEX CHART

HI 80-90 degrees F. CAUTION: Fatigue possible with prolonged exposure and physical activity.

HI 90-105 degrees F. EXTREME CAUTION: Heat cramps and heat exhaustion possible.

HI 105-130 degrees F. DANGER: Heat cramps, and heat exhaustion likely, and heat stroke possible.

HI 130 or higher. EXTREME DANGER: Heat stroke is likely with continued exposure.

www.nws.noaa.gov/om/heat/index.shtml

5. American Housing Survey for the United States 2009, U.S. Department of Housing and Urban Development; U.S. Government Printing Office. Washington, DC, 2040; HI 50/09; pages 18 and 29. Printed March 20, 2011.

Description of the C-7 Housing Unit at the Hutchins State Jail

During my site visit to the Hutchins State Jail in Dallas, Texas on September 26, 2012 I visited the C-7 Housing Unit. This Unit is part of a one story building (Photo #001669). The housing area is a large open unit where approximately 58 inmates are housed. This is an open dormitory type housing unit with bunks on the perimeter (Photo # 001657, 001665, & 001666), day room tables and benches in the center (Photo # 001664, 001656, 001654 & 001655) and toilets, lavatories, and showers in a partially enclosed area just off the center day room area. (Photo # 001663& 001661). The windows on the perimeter of this unit are at approximately 10 feet high and are sealed shut (Photo # 001659 & 001658). In the day room area just outside the toilet and shower, there is a circulating fan near the ceiling level. (Photo # 001660) There is an exhaust fan (Photo # 001662) at the ceiling which is used to help remove air from this housing unit so it can circulate the fresh air being introduced into the unit via air supply registers (Photo # 001652 & 001667) from the outside located air handler units. (Photo # 001670)

<u>Ventilation and Ambient Environmental Condition Information Noted from my Review of TDCJ</u> <u>Hutchins Documents Provided by Legal Counsel and from my On-Site Visit, 9/26/2012</u>

While making an inspection of the Hutchins State Jail on September 26, 2012, Hutchins Facility personnel showed me the air handling unit which serves to bring fresh air into housing Unit C-7. (Photo # 001650) This is a one story, large open dorm type housing unit with bunk beds around its perimeter. It contains showers, toilets, and lavatories. The large center areas of this facility are used for eating, reading and other day room activities. There are large fixed closed windows at approximately three quarters of the way up the walls. It was explained to me that this mechanical piece of equipment located just outside of the C-7 housing unit is not an air conditioning unit but rather is simply a mechanical fan system that cannot cool the air before the air is introduced into the housing unit. This unit does not cool the air nor control the humidity of the air entering the housing unit. I did not observe any water fountains (usually means a cold water piped electrically operated unit from which people drink water) in the dorm (C-7) but only a portable Igloo type gravity operated water dispensing container, and sinks in the restroom area. (Photo # 001653 & 001651) During hot days the air handlers bring in air from the outside into the housing unit. If the air outside is 103 degrees then 103 degree air will be introduced into the housing unit. I verified that this is true in that the average air temperature at the air supply registers (Photo # 001652 & 001667) on September 26, 2012 inside of the C-7 housing unit was recorded by me using the calibrated VelociCalc Plus, Model # 8386 electronic instrument at 93

degrees Fahrenheit and that the relative humidity, using the same instrument on the same day produced an average Relative Humidity reading of **39%**. I also took outside temperature and humidity readings in the shade at the **entrance door to Unit C-7** and the average temperature was recorded at **92** degrees Fahrenheit and the relative humidity was recorded at **44%**. Likewise, I took temperature and relative humidity readings in the sun at the **intake of the air handling** unit and they were recorded as **94** degrees Fahrenheit and **44** % relative humidity. Given the inherent instrument accuracy for temperature measurements of +\- 0.5 degrees Fahrenheit and +\- 3% Relative Humidity, this data actually shows that the outside air is merely transported into the housing unit without being conditioned.

When the human body temperature rises, air movement helps the body to get rid of body heat via evaporation of sweat as long as the humidity is low enough to allow the heat to be lost to the air. As the humidity increases, the less heat the body is able to give up to the air.

The ACA Standard 4-4152 clearly states that at least 10 cfm of fresh or recirculated filtered air should be provided per occupant. The two supply registers at the front of the C-7 Housing Unit provided at least that amount of air. In an article on heat related injuries on the web-site of North Western Oklahoma State University, it states that at some point when the air relative humidity (moisture in air) is so high, the human body cooling mechanism via sweating doesn't effectively work and cool the body by giving up heat to the air via evaporation. Also at some point when the air temperature is above the body temperature, increased air movement alone cannot effectively continue to reduce the temperature of the human body and in fact increased air flow transfers more heat to the human body. Thus, using fans may be counterproductive at temperatures above 98.6. This is likely the case when using only a mechanical air mover, like the one used at the Hutchins Facility. It is not capable of controlling temperature and humidity. As previously noted, the ACA Standard 4-4153 clearly indicates in the comments section of the standard that temperature and humidity should be capable of being mechanically raised or lowered to an "acceptable comfort level."

Also, in a warm environment, where there is not enough difference between the body's temperature and its surroundings then besides evaporative cooling, the other three cooling mechanisms, convection, conduction and radiation, may not be able to effectively help cool the body. The calculated high "Heat Index" levels reached "EXTREME CAUTION," "DANGER," and "EXTREME DANGER" levels at the Hutchins Facility while Mr. McCollum was being held there (7/18/2011 – 7/22/2011) and this indicates that "acceptable comfort levels" were certainly not present at the Hutchins Facility during those dates.

Maintaining acceptable comfort level temperatures seems to be a problem at this facility. In an American Correctional Association (ACA) report about this facility, entitled "Commission on Accreditation for Corrections Standards Compliance Reaccreditation Audit" dated January 11-13, 2010, I read comments on page TDCJ – RFP #25-35, third paragraph that the auditors noticed that the environmental conditions in the dormitories were very cold for Dallas and that the heating of dormitory space was noticeably inconsistent. This, to me, indicates that they did not do or because of the type of equipment they have could not do what was/is necessary to control the inside environmental temperatures. It also is possible that it could be a combination of both of these factors.

I also briefly read through TDCJ grievances (# 2011095794; #2012043698; #2011188318; #20112030806; #201113339; #2012063479; #2011081847; #2010186196; #2012174048), and many indicated discomfort with the temperature comfort level and even discussed levels that were affecting their health. Clearly these grievances indicate that the inmates who filed them felt an acceptable comfort level was not being met in their housing units. In many instances it took, what appeared to be as much as 40 days from the date of the grievances being filed to the date when repairs were noted as complete.

Also, I reviewed some Work Orders and noted that very long periods of time were involved in completing the repairs or taking actions necessary to address the issues. Some very seemingly simple corrective actions, took very long times to get done. Some examples of these long periods of time are as follows:

#209912002374 =~ 4 days to reset trip switch on heating unit (a task that probably takes less than a minute or two) in January 2012;

#209912003540= ~6 days to reset alarm on heating unit in March, 2012;

#209912004647= $^{\circ}$ 90 days to get new pilot bearings on supply fan for it to be operating properly from May through August of 2012;

#209912000838 =~ 51 days to rebuild a shower valve from October to November, 2011;

#209911002364=~ 40 days to get shower operating;

#209911003335=~ 7 days to repair a "busted" shower line, March through April, 2011;

#209911003755=~45 days to get an inoperative shower repaired from March through the end of May, 2011.

Likewise, I read a Hutchins memorandum dated August 17, 2011, (Bates number 001414), from Mr. Roy Storie of Administrative Review & Risk Management, to Jeff Pringle, Warden at Hutchins Jail, regarding offender housing temperatures. It clearly indicated that air supply units in offender housing units K-1, K-2, and K-3 were not working on 8/12/11 when the outside temperature at 10 AM was 92 degrees Fahrenheit and the inside temperatures of these units was up to as high as 88 degrees Fahrenheit. It should be noted that the repairs were not corrected until 8/18/2011, at least 6 days later.

During the time that these 3 fans were not working, I used the TDCJ Hutchins Facility (self-generated) Temperature Logs, (Bates number 001517), for 8/12/2011 to find that the high outdoor air temperature was 108 degrees F. at 4:30 PM with a concurrent relative humidity (%RH) level of 44%. Using this data, the calculated Heat Index (HI) level, which is explained later in this report, reached 135 degrees F. which is in the Extreme Danger Level. On 8/13/2011 with a high temperature of 90 degrees F. and a concurrent %RH of 74%, the Heat Index (HI) = 109 degrees F. On 8/14/2011 with a high temperature of 106 degrees F. and a concurrent %RH of 43%, the HI = 128 degrees F. These Heat Index (HI) levels 128 and 135 degrees F. put these inmates in the "EXTREME DANGER" category which means heat stroke

would be likely with continued exposure. The HI of 109 degrees F. put the inmates in the "DANGER" category where heat exhaustion is probable. The memorandum from Mr. Storie to Warden Pringle, (Bates Number 001414), on August 17, 2011 indicated the indoor air temperatures on 8/12/2011 at 10 AM reached 88 degrees F. in Unit K-3. The TDCJ Temperature Logs for that day, (Bates Number 001517), indicated a %RH of 74 %. Using this data, I calculated an indoor HI of 103 degrees F. which is in the "EXTREME CAUTION "range where heat exhaustion is possible. Please note that a HI of 103 degrees F. is only one degree from 104 degrees F. which is in the "DANGER" range where heat exhaustion is probable. Also these temperatures and the noted effect on people's health is for normally healthy individuals and people with underlying medical conditions or those taking certain types of medication will be affected more than healthy people. I realize this is not the exact period of time when Mr. McCollum was at the Hutchins Jail, but it is close to that time and does demonstrate to me, the extreme conditions offenders at the Hutchins Jail had to endure. It also indicates to me that this facility's administration apparently still failed to comprehend the seriousness of such situations, having the fans down for up to 6 days during high heat events, even just after Mr. McCollum's death. One would expect them to have expedited the repairs of critical pieces of equipment such as these air supply units.

The inability to maintain comfort levels and healthful levels in the dormitories indicates that the offenders housed in these units were and continue to be (if past practices have not been rectified) in jeopardy of sustaining heat related illnesses, which is what appears to have occurred in Mr. McCollum's case. The Coroner's report listed as the cause of Mr. McCollum's death "Hyperthermia" due to lack of air conditioning. This seems to support my findings of very high Heat Index levels during the time Mr. McCollum was at this facility. This will also be discussed later in this report.

Heat Index

As previously stated, I used Hutchins State Jail employee memoranda, (Bates Number 001414), which documented temperature and humidity readings taken by Hutchins facility personnel in 2011. Also I used TDCJ's self-generated Temperature Logs (Random samplings of such data were from both inside and outside of various Hutchins housing units which are all located in relative proximity of each other.

The Hutchins State Jail "Temperature Logs" contain daily temperature and relative humidity readings from outside locations at the Hutchins State Jail over 12 hour periods, 6:30 AM to 6:30 PM each day. This data from July 7 through July 31, 2011, (Bates Numbers 001481 through 001504), included temperature and relative humidity readings during a period of time when Mr. McCollum was at the Hutchins State Jail, July 18 through July 22, 2011. (Bates Numbers 001491 through 001495).

I also used historical temperature and relative humidity data I retrieved through the Weather Warehouse Data Company from the Dallas Redbird Airport, Dallas Texas reporting station which is approximately 6.3 miles from The Hutchins State Jail to demonstrate the harsh high heat and humidity environmental conditions the offenders at this facility must endure.

"Weather Warehouse weather data comes from multiple agencies of the US Government's National Oceanic and Atmospheric Administration (NOAA), including the National Climatic Data

Center (NCDC) and the National Weather Service (NWS). Data from these agencies is quality controlled at both at the NCDC end and at the Weather Source end. The quality control process involves numerous error checks and ensures you of the reliability in the data. While a 100% perfection guarantee could never be made by Weather Source or the US Government due to the complexity of the overall system, every effort is made by both Weather Source and the US Government to provide the most error-free product possible, and the quality of the data is generally accepted as very reliable and trustworthy and the most reliable data available." The Weather Warehouse data was obtained from "the Weather Source, LLC of Amesbury, Massachusetts; http://www.weathersource.com and http://www.weather-warehouse.com

Using this type of data is routine in my field, and considered highly reliable.

I also took my own temperature and humidity readings in and outside the Hutchins housing units on September 26, 2012 when I visited the site a year after Mr. McCollum's death.

The temperature and relative humidity data from the above noted sources were used to calculate the Heat Index (HI) for the days Mr. McCollum was at the Hutchins State Jail.

Temperature and Humidity Data Discussion Using Weather Warehouse Data

I had access to two sets of data. One set was the temperature and relative humidity readings allegedly taken at the Hutchins State Jail (Temperature Logs) and the temperature and relative humidity readings obtained from the Weather Warehouse-Weather Source which is very reliable historical climatological data as explained previously in this report. Having data available from the Hutchins State Jail as per their documents is helpful to calculate the Heat Index at the facility itself. To check the Hutchins data, I also used historical climatological data collected by a government reporting station at the Dallas Redbird Airport in Dallas, Texas which is approximately 6.3 miles from the Hutchins facility. **The discussion below will be centered on the data obtained from the Dallas Redbird Airport reporting Center.** The data provided by the Hutchins Jail will be discussed later in this report.

<u>Dallas Redbird Airport</u> location readings for the 25 days in July 2011 (July 7, through July 31, 2011) revealed the following:

- -During these 25 days, which included the days Mr. Larry McCollum was at this facility, the **highest** ambient temperatures were above 100 degrees Fahrenheit (100 to 105 degrees F.) for 21 of the 25 days. The **highest** temperature of the remaining 4 days in this 25 day period registered 99 degrees F.
- -The <u>daily high</u> temperature of 100 degrees Fahrenheit and above fell in the 2PM to 6PM time period. There were two, 8 consecutive day periods, in which the highest ambient temperature during these periods of time reached 100 degrees F every day.
- -The <u>daily average</u> temperature during these 25 days registered above 90 degrees F. for 22 of the 25 days.

The NOAA Heat Index Calculations, which include the ambient temperatures and associated relative humidity readings, resulted in **Heat Index** calculations of the range of temperatures from **103 to 109 degrees F**. for 25 consecutive days. Low relative humidity recordings at this site kept the **HI** from reaching the Extremely Dangerous Levels; however it did reach the EXTREME CAUTION and DANGER levels which could result in the heat related illness shown below.

HI 90-105 degrees F. EXTREME CAUTION - heat cramps and heat exhaustion possible.

HI 105-130 degrees F. DANGER: heat cramps and heat exhaustion likely, and heat stroke possible.

During the days Mr. McCollum was at the Hutchins State Jail, July 18 through July 22 which was the date of his seizure and removal from that facility to the Parkland Hospital, the following conditions were recorded from the Dallas Redbird Airport reporting Center, only 6.3 miles from the Hutchins State Jail. (See below)

TABLE NUMBER 1

(2011) (1)	(2)	(3)	(4)	(5)	(6)	<u>(7)</u>
<u>Date</u>	Temp. Range F.	Max Temp F.	% RH Range	24 hr. Avg F.	Hrs.>/=100 F	Hr.>/= 90F.	HI F.
7/18	80 -102	102	29- 69(32)	91.33	5 hour	13 hours	107 D
7/19	79 – 100.9	101	36 -79(33)	93.84	3 hours	12 hours	106 D
7/20	79 - 99	99	34-74(34)	89.09	0 hours	12 hours	103 EC
7/21	82 -100.9	101	26-67(26)	91.28	4 hours	13 hours	102 EC
7/22	81 -100	100	32-72(32)	90.9	1 hour	13 hours	104 D

The Heat Index ranged from **EC**=EXTREME CAUTION to **D**= DANGER

Temperature and Humidity Discussion using the Data from the Hutchins State Jail Temperature Logs:

Having data available from the Hutchins State Jail as per their own documents (Bates Number 001491, 001492, 001493, 001494 and 001495) is helpful to calculate the Heat Index at the facility itself. This data covers only 12 hours (6:30 AM - 6:30 PM) periods each day and this means that some data points obtained from the Weather Warehouse are not part of the available data the Hutchins State Jail provided.

The Heat Index (HI) used in the <u>Table Number 2</u> below is calculated from the highest temperature and the associated relative humidity as noted on the TDCJ Temperature Logs at the same hour. For example on 7/18/2011, the highest Heat Index temperature calculated on the TDCJ Temperature Log was 120 degrees Fahrenheit at 4:30 PM while the air temperature was recorded at 106 degrees Fahrenheit and the relative humidity at that time was 46 %. By using these raw temperature and humidity data and The NOAA NWS Heat Index Chart, the HI was found to be 130 degrees F. **(see column 8). The HI recorded on the Hutchins State Jail Temperature Logs by Hutchins State Jail personnel for that time and date was 120* degrees Fahrenheit. (See column 7-first line of the <u>TABLE NUMBER 2</u> below that is underlined.) This Heat Index number is not accurate. By using the raw temperature and humidity data, a correct HI can be calculated and is shown below as 130 degrees Fahrenheit (Column 8) which is in the EXTREMELY DANGER category. If this facility is to rely on this data to help set heat policy actions for inmates, then those persons responsible for taking the temperatures and humidity readings and calculating the Heat Index (HI) must know how to read these data and properly derive the HI temperature which is not the case with this bit of data on 7/18/2011. See table 2 below:

 4	к	LE	N	 M	к	-	ĸ	,

COLUN	ΛN (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
(2011) <u>Date</u>	• -	Max <u>Temp F</u> .	Percent RH Range	13 hr. Avg F.	. <u>Hrs.>/=100 F</u>	Hr.>/= 9	Hut. <u>0 F</u> . <u>HI F.*</u>	NOAA- <u>HI F. *</u>	
7/18	78 -106	106	42-68(46)	97.0	7 hour	10 hours	<u>120</u>	130	ED
7/19	75 – 114	114	37-73 (59)	102	8 hours	10 hours	150+	137++	+ED***
7/20	76 – 105	105	42–71 (46)	95	4 hours	10 hours	113	128	ED
7/21	80 -107	107	40–75 (46)	96	6 hours	9 hours	118	135	ED
7/22	81 -104	104	35–69 (45)	94	6 hour	8 hours	113	124	D
D = D	ANGER EI	D = EXTREI	ME DANGER		HI F* & HI** = F	Heat Index	in degrees	Fahrenh	neit

As previously indicated in the paragraph before Table 2, The Hutchins State Jail personnel calculated the Hutchins Heat Index, (HUT. HI F.* Column 7) and the values calculated are inaccurate and this can be seen in checking other TDCJ Temperature Log pages (Bates Number 001481- JULY 7, 2011 for 2:30 PM) where they calculated the HI to be 104 degrees F. however the actual calculated value using the Heat Index Calculator is 113.3 degrees F. Another example of incorrect calculations can be seen on Bates Number 001487- July 14, 2011 for 12:30 PM where the air temperature is shown to be 99 degrees F. and the relative humidity is recorded as 72%. The HI calculated by the Hutchins personnel is shown as 105 degrees Fahrenheit on the TDCJ Temperature Log, however the actual HI as noted using the NOAA-NWS Heat Index Chart is 137+++ degrees Fahrenheit which is the upper limit of the Chart. This falls into the "EXTREME DANGER" category where Heat Stroke is imminent. This matters greatly because it could

cause the wrong heat illness category warnings (DANGER instead of EXTREME DANGER) to be assigned and the correct precautionary actions would not have been taken to the detriment of the inmates in that unit. If the Warden relies on this data to take actions on very hot days, the people taking these measurements and calculating the Heat Index, HI, need some more intensive and stringent training.

Note: ***In column 8 for the date of 7/19,(Bates Number 001492) the calculated HI F, using the NOAA-NWS high temperature for that day and time (114 degrees Fahrenheit and the corresponding relative humidity 59%), is a very high value(137+++degrees F that is actually off the NOAA-NWS Heat Index Chart, but is clearly in the EXTREME DANGER ZONE.

Comparison of Heat Index Calculations with data from Historical Data Source (Redbird Airport) and the temperature and relative humidity from the Hutchins Jail Temperature Logs

Using Hutchins' raw temperature and % relative humidity data from the Hutchins Jail Temperature Logs, Hutchins personnel recorded the Heat Index (HI). (See Column 1 in Table 3 below). Using Hutchins Jail Temperature Log data, temperature and humidity, from the dates noted below in Table 3, I calculated the Heat Index (HI) using the NOAA-NWS Heat Calculator (See Column 3 in Table 3 below) and found them to be higher than the Heat Index noted on the Temperature Logs (See Column 1 below) provided by the Hutchins Jail. I also used the historical climatological data from the Weather Warehouse database (Dallas Redbird Airport Reporting Station) and calculated the HI. That Heat Index (See Column 2 below) except in one instance was higher than the other Heat Index calculations shown in Column 1, however please note all the HI calculations were in the Extreme Caution or Danger Level. Data that I calculated in Column 2 and 3 shows the HI to be mostly in the "EXTREME DANGER" category and is a more serious situation than just the "DANGER" category. Extrapolation of data from charts is difficult and therefore a simple HI Calculator could provide a more accurate HI calculation.

http://www.srh.noaa.gov/epz/?n=wxcalc_heatindex

113 F. D

7/22

	(1)	(2)	(3)
2011 <u>Date</u>	Hutchins Calculated HI using Their Temp Log raw data	Calculated HI using Historical climatological data	My Calculation of HI using Hutchins Temp log raw data
7/18	120 F. D	137+++ F. ED	130 F. ED
7/19	150 F. ED	137+++F. ED	137+++F. ED ***
7/20	113 F. D	133 F ED	128 F ED
7/21	118 F. D	133 F ED	135 F ED

TABLE #3

136 F.

ED

124 F.

D

EC=EXTREME CAUTION D=DANGER ED=EXTREME DANGER

The high calculated Heat Index (HI) at this facility, in my opinion, indicates that the risk to prisoner health was present during the times in which the Plaintiff, Mr. Larry McCollum was housed in the Hutchins State Jail in Dallas, Texas and during the months leading up to and after his death.

This comparison of Heat Index readings shows that high temperature and high humidity levels elevate the Heat Index (HI) and the higher the HI, the more dangerous the correctional environment becomes for heat related illnesses. This increasing HI puts the offenders at risk for heat exhaustion, heat cramps, and heat stroke for healthy inmates and especially more dangerous for inmates due to their increasing age, morbid obesity, concurrent medical conditions and subsequent medications for diabetes, hypertension (diuretics), and psychological disorders (psychotropic medications).

Precautionary Measures

When high heat temperatures and humidity levels are noted, prisoner health can be protected by implementing precautionary measures based on a well thought-out prisoner medical based priority program to receive special treatment. The inmates who would be most medically affected would be given a high priority level for receiving precautionary treatment. These actions could at lower priority levels just include such things as allowing minimum clothing to be worn inside a housing unit, allowing offenders to shower during all daylight hours, and providing ample amounts of water and ice and other cold liquids for all inmates throughout the day and night. These steps may be adequate for healthy prisoners. Those on high priority level, including those suffering from medical conditions like hypertension, diabetes, and obesity, should continue to receive those precautions, but would also benefit from being moved to an area where reflective film or awnings have been placed on the windows in housing units and also providing time in respite areas (cool and possibly air conditioned areas or multi-purpose rooms), even if only on a rotating basis and if only for a few hours a day. There are also cooling devices, such as misters, or portable air conditioning units, that could help cool parts of the prison where prisoners with heat-sensitive medical conditions are housed. Of course, the simplest, most effective way to protect prisoners suffering from heat-sensitive medical conditions would be to assign them to air conditioned housing.

It needs to be emphasized that the Centers for Disease Control, CDC, states "Air-conditioning is the number one protective factor against heat-related illness and death." www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp

This is especially needed for those who are at most risk of heat related illnesses due to personal medical conditions such as advancing age, morbid obesity and other medical conditions such as hypertension, diabetes, and psychological disorders requiring medications such as psychotropic medications which affects the body ability to control its internal temperature.

Acclimatization of the inmates could play a role in helping relatively healthy individuals to be gradually, over periods of time, introduced to the high heating levels until they can tolerate it better. Even though acclimatization would help healthy individuals better tolerate high temperatures, they still would have

to take precautions not to overheat on high heat days, such as the period Mr. McCollum was incarcerated at Hutchins in 2011. Mr. McCollum came from a jail where the temperature is maintained by law between 65 degrees and 85 degrees Fahrenheit. See 37 Texas Administrative Code § 259.160.

If such a comprehensive precautionary program is implemented, the instances of adverse medical effects of high temperature and humidity levels in correctional facilities could be reduced.

It has been reported in the newspapers and evening news broadcasts how heat waves (events) have been detrimental to people's health. Most often it is reported that the sick and elderly are the ones suffering and dying during these adverse events.

The American Housing Survey for the United States, 2009, (U.S. Census Bureau, Current Housing Reports, Series HI 50/09, "American Housing Survey for the United States: 2009." U.S. Government Printing Office, Washington, D.C., 20401 Printed in 2011) shows very clearly that air conditioning is considered such an important part of life that of the 130,112 total (occupied and unoccupied) number of all housing units surveyed, 82,475 or 63.4% have central air-conditioning in them. Of the 130, 112 total (occupied and unoccupied) housing units surveyed, 115,518 or 88% had some type of air-conditioning in them. Of some 5, 955 newly constructed housing units built within 4 years of the American Housing Survey for the United States in 2009, some 5,279 housing units or 88.65 % had central air-conditioning units installed in them.

It should also be noted that of the 111, 806 occupied housing units surveyed, 78,437 or **70.15** % have central air-conditioning installed in them. Also of the 111,806 total occupied housing units surveyed, 103, 019 housing units or **92.14** % had some kind of air-conditioning units in them. Even for those few that do not have air conditioning in their homes, "free people" can go to an air conditioned movie, grocery store, library, church, or relative's house for short periods of time to get some relief from dangerous levels of high heating temperatures. Incarcerated people don't have the freedom to do this to prevent heat illnesses from occurring. The administration of the facility must provide these things to the inmates to prevent them from succumbing to heat illnesses.

The American Housing Survey for the United States, 2009 reported that of the 41,586 housing units surveyed in the Region defined as the "South," 39,501 or **94.99** % had central air-conditioning units in them for that very hot and humid climate area of the South (United States). Dallas, Texas is "in the South" according to the HUD survey.

This leads me to conclude that air-conditioning is needed in the "South" such as the area around Dallas, to prevent heat associated illnesses and even death, especially for those with pre-existing and debilitating medical conditions requiring certain medications for which high heat could be detrimental to those types of people's health.

Even with some helpful equipment such as cooling showers, "Corrective Work Order" documents show how the use of precautionary measures such as more frequent showers could be hard to implement as many of these work orders shower repairs for inoperative showers took from 3 days to 6 weeks to affect

the needed repairs. Even on the date of my scheduled site visit, 25% of the showers in the C-7 Housing Unit were inoperative. In my opinion, disregard for a very important element of precautionary measures like showers, seems to indicate this facility doesn't take high heat issues, which can lead to heat related illnesses, very seriously.

I checked the water temperatures from sinks in the C-7 Housing Unit and the water registered 80 degrees Fahrenheit. If this water is expected to be used for drinking purposes during hot weather events, in my opinion, this is not near the temperature of ice water which is the recommended precautionary step to be provided during these high heat events.

Conclusion

Because of the high "Heat Index" levels recorded by the Hutchins State Jail and calculated by me from historical climatological data obtained from an official weather reporting site only 6.3 miles from the Hutchins Facility during the dates Mr. McCollum was in Unit C-7 at this facility, the history of long repair times especially of essential precautionary measures (inoperative showers) and because of the reported Coroner's death diagnosis of "Hyperthermia" for Mr. McCollum, it is my conclusion\opinion that he was put at risk for heat related illnesses. He came into a very hot environment from an air-conditioned jail and within 4 days had a seizure and died of what the Coroner diagnosed as "Hyperthermia. These high heat environmental conditions noted in my report likely at least contributed to the risk for heat stroke, heat cramps, heat exhaustion and the death of Mr. McCollum while in the Hutchins State Jail in the summer of 2011. It appears, because of his death, that despite Mr. McCollum's age, poor physical condition, serious medical diagnosis and medication regime, he was not put in a high enough priority category when he first checked into the Hutchins State Jail, which should have included some stronger remedial steps which would, in my opinion, have offered some protection from the dangerous high heat conditions being encounter there at the time he came to this facility. Conservative and doable remedial measures, as already discussed, must be provided during high heat days. Especially the provision of limited air conditioned respite areas used on a rotating basis for high heat priority offenders or the installation of air conditioning in housing units for these types of offenders (elderly, medically compromised, and\or those offenders taking certain types of medications) needs to be undertaken at this facility so future heat illnesses and even deaths such as Mr. McCollum's death can be prevented. Adequate provision of these remedial precautionary measures do not appear to have been provided at this facility during the time Mr. McCollum was an inmate at the Hutchins State Jail from July 18 to July 22, 2011.

Note:

I, James J. Balsamo, Jr. have been retained by the Texas Civil Rights Project, Prisoner Rights Program, hereinafter "TCRP" at a rate of \$ 125.00 per hour for report research, inspections, site visits, report preparation and waiting time for court testimony, except for the day of testimony. Court testimony fees are \$2000.00 per day plus actual expenses such as travel (air and ground transportation), lodging meals and other miscellaneous expenses. Deposition fees are \$ 1500 per day, plus actual expenses for the preparation and court testimony. Of course all reasonable associated expenses will also be expected to be covered by the retaining of me for this investigation. My role, unless otherwise notified is to provide assistance as an expert consultant in the McCollum Case at the Hutchins State Jail in Dallas, Texas. My fees are in no way contingent on the nature of my findings or the outcome of any proceedings.

James J. Balsamo, Jr. Environmental Health and Safety Consultant Date: 20 December, 2013

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 47

RONALD W. BROWN, P.E.

Professional Engineering and Consulting

3200 Southwest Freeway Suite 2121

Houston, TX 77027-7525

713 621 5660 fax 713 621 5816 cell 832 338 3300

SUMMARY OF QUALIFICATIONS

- 40 Years experience in design of MEP systems for Residential, Commercial, Educational, and Industrial Projects
- Managed projects ranging from \$100,000 to \$33 million
- Directed medium sized commercial engineering firm
- Determined MEP systems, Fire Protection Systems and Energy Management System
- BSME 1972 Lamar University, Beaumont, Texas
- Have been Registered in 23 states
- NCEES License #8384

AREAS OF EXPERTISE

- HVAC Systems
- · Plumbing Systems
- Automatic Control Systems
- Energy Management
- Litigation Support

- Electrical Systems
- Fire Protection Systems
- "MEP" Specification Writing
- Energy Audits
- Due Diligence Reports

EXPERIENCE

Ronald W. Brown, P.E.

Professional Engineering & Consulting

2004-Present

DBR Engineering Consultants (Houston, TX)

Partner

- Managed MEP Engineering firm (70 people)
- Performed and directed MEP design, energy analysis and wrote specifications
- Developed proposals and negotiated contracts

Day Brown Rice, Inc. (Houston, TX)

Partner

- Managed MEP Engineering firm (45 people)
- Performed and directed MEP design, energy analysis and wrote specifications
- Developed proposals and negotiated contracts

David W. Day Associates, Inc. (Houston, TX)

Vice President

- Managed MEP Engineering firm (17 people)
- Performed and supervised MEP Design & Energy Analysis

Wood Leppard Mechanical Contractors (Houston, TX)

Project Manager

- Supervised construction of mechanical systems for commercial projects
- Estimated mechanical cost of projects

June 1985 thru Feb. 1988

Feb. 1988 thru June 2004

June 1982 thru June 1985

Sept. 1981 thru June 1982

Ronald W. Brown, P.E.

Page 2

Brady Lohrman Pendleton Diab Engineers (Houston, TX)

Project Manager

- Designed MEP systems for commercial projects
- Managed staff of 20 people

Fluor Engineers and Constructors (Houston, TX)

Project Engineer

- Designed Mechanical Systems for industrial projects
- Worked in Saudi Arabia

Cook and Holle Engineers (Houston, TX)

Project Engineer

- Designed Mechanical Systems

March 1974 thru Feb. 1976

Aug. 1979 thru Sept. 1981

Feb. 1976 thru Aug. 1979

Associated Engineering Consultants (Houston, TX)

Engineer in Training (EIT)

- Designed Mechanical Systems
- Designed Electrical Systems
- Designed Plumbing Systems

June 1972 thru March 1974

PROFESSIONAL AFFILIATIONS

President - Houston Chapter of Construction Specifications Institute	1996 - 1997
Board of Governors - Houston Chapter of ASHRAE	1991 - 1994
President – Houston Chapter of ASPE	1983 - 1985
Have been a Member of: ASHRAF CSL ASPE NEPA ICRO ROCA IES	ASME TSPE SAVE

PERSONAL AFFILIATIONS

Lifetime Committeeman - Houston Livestock Show and Rodeo	Since 2000
Member of the Arabia Shriners	Since 1979
Royal Order of Scotland	Since 1994
Lifetime Member of Sons of the Republic of Texas	Since 2003
Past President of San Jacinto Chapter #1 of the Sons of the Republic of Texas	2010-2012
Member of Sons of the American Revolution	Since 2011

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

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§	CIVIL ACTION NO.
§	4:14-cv-3253
§	JURY DEMAND
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§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 48

	NO.	
McCOLLUM	§ 8	IN THE DISTRICT COURT OF
vs.	\$ \$ 8	TEXAS JUSICIAL DISTRICT
LIVINGSTON (HUTCHINS UNIT)	§	vosienia bioridor

AFFIDAVIT OF RONALD W. BROWN, P.E.

STATE OF TEXAS

§

COUNTY OF HARRIS

§

BEFORE ME, the undersigned authority, on this date personally appeared Ronald W. Brown, P.E., who being by me first duly sworn, did depose on his oath and state as follows:

- 1. My name is Ronald W. Brown. I am over the age of twenty-one, of sound mind, and am in all ways competent to make this affidavit. The facts stated herein are based upon my personal knowledge and are true and correct.
- 2. I am a licensed professional engineer actively engaged in the practice of engineering in the state of Texas. I hold a Bachelor of Science degree in Mechanical Engineering from Lamar University (1972), am a Registered Professional Engineer in Texas (#45599) and have been registered in 23 other states. My education and experience are set forth in greater detail in the attached *curriculum vitae*.
- 3. I have been a member of several professional associations, including the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the Construction Specifications Institute (CSI), American Society of Plumbing Engineers (ASPE), National Fire Protection Association (NFPA), International Conference Building Officials (ICBO), Institute of Engineering Science (IES), American Society of Mechanical Engineers (ASME), Texas Society of Professional Engineers (TPSE), and the Society of American Value Engineers (SAVE). I have also served as the President of the Houston chapter of ASHRAE, and President of the Houston chapter of ASPE.
- 4. My professional career began with Associated Engineering Consultants in Houston Texas in 1972, where I designed mechanical, electrical and plumbing systems. I joined Cook and Holle Engineers in Houston, Texas, in 1974 as a project engineer, designing mechanical systems. In 1976, I joined Fluor Engineers and Constructors, in Houston,

where I designed mechanical systems for industrial projects and work on projects in Saudi Arabia. Beginning in August of 1979, I served as a project manager for Brady Lohrman Pendleton Diab Engineers in Houston, designing mechanical, electrical and plumbing (MEP) systems for commercial projects and managed a staff of 20 persons. In 1981, I joined Wood Leppard Mechanical Contractors as a project manager in Houston, where I supervised the construction of mechanical systems for commercial projects and estimated the cost of mechanicals for those projects. Beginning in 1982, I served as Vice President of David W. Day Associates, Inc, an MEP firm in Houston, where I managed the firm's staff of 17 persons and performed and supervised MEP design and energy analysis. In 1985, I became a partner in Day Brown Rice, Inc. in Houston, and managed the firm's staff of 45 persons, performed and directed MEP design and energy analysis, wrote specifications, developed proposals and negotiated contracts. I became a partner in DBR Engineering Consultants in Houston Texas in 1988, and performed the same functions as I had at Day Brown Rice. From 2004 to the present I have been working as an independent professional engineering consultant.

- 5. My expertise includes HVAC systems, plumbing systems, automatic control systems, energy management, electrical systems, fire protection systems, MEP specifications, energy audits and due diligence reports. I have dedicated a great number of years to designing and supervising the construction of mechanical systems, including HVAC systems. I am intimately familiar with the design, components, characteristics and operation of heating systems, including the operation, maintenance and repair of heating systems designed for residential use and commercial projects.
- 6. In addition to the foregoing summary of my professional qualifications, attached as Exhibit A and fully incorporated in this affidavit, is a true and correct copy of my current *curriculum vitae*, which summarizes my relevant qualifications, including professional education, certifications, and experience as an expert in the professional practice of mechanical engineering as applied to the design, operation and maintenance of mechanical, electrical and plumbing systems.
- 7. I have been engaged by Jeff Edwards as a consultant in this Cause. In accordance with his request, I have reviewed the specifics related to the Air Conditioning systems installed at the Hutchins State Jail and other similar projects. This jail is located southeast of Dallas in Dallas County and I personally inspected the facility.
- 8. I have reviewed the following documents:
 - a. Deposition of Tommy Vian and exhibits
 - b. Deposition of Kim Farguson and exhibits
 - c. Documents related to air handlers and HVAC systems at the Hutchins Unit
 - d. Temperature and humidity logs form the Hutchins Unit
 - e. Email correspondence between Roy Storie and Jeff Pringle
 - f. Expert report of James Balsamo

GENERAL COMMENTS:

- A. There are numerous existing buildings at the Hutchins Facility. There are 12 buildings on the site, not counting the small storage buildings. We toured 4 of the buildings including the chow hall, medical building, building K (where the solitary confinement cells are located), the C building, the C7 dormitory unit in the C building, the chapel area, and the administration building (including the armory).
- B. It appears that all the buildings are air conditioned except the chow hall and dormitory buildings. The chow hall and dormitory buildings are only heated and ventilate, but not air conditioned.
- C. The buildings are all sheet metal roofs with concrete block walls and steel structure. There was insulation visible in each of the observed buildings.
- D. Each of the buildings were air conditioned except the chow hall and the dormitory buildings. I estimate the interior temperature of these buildings in the summer would be at least 105 to 108 degrees. The humidity would track the outside air conditions. From reviewing the data, I see the humidity regularly exceeds 60 percent during the summer, and the heat indexes routinely exceed 100, even reaching 120 or 130. In fact, heat logs documented by TDCJ showed heat index temperatures exceeded 135 on numerous occasions in the days preceding Mr. McCollum's death. These are unlivable conditions. I understand these conditions have been recorded and made available to prison officials, including the warden.
- E. There are ventilation fans installed in the chow hall and the dormitory buildings. The ventilation fans added, but would not decrease the dry bulb conditions. Thus, these buildings would be unbearably hot.
- F. Our onsite observation occurred on Sept. 23, 2013. We arrived about 10:00 and left about 2:00. The outside air temperature was measured and was approximately 74 in the morning and rose to approximately 81 degrees in the afternoon. The humidity was also measured, and arranged from 20% to about 40% RH.
- G. The interior temperatures of each building observed was measured and recorded to be 80 degrees in the un-air conditioned buildings and about 74 in the air conditioned buildings.
- H. The chow hall was also heated and ventilated only. The kitchen area would be unbearable in the summer. I can only imagine what happens to the humidity when the facility is fully operational and occupied. The ventilation air is distributed thru duct work in the chow hall.

AIR CONDITIONING SYSTEM:

- A. The air conditioning systems consisted of small system "DX" for small zones such as guard stations, and larger packaged equipment that served the administration area and medical area.
- B. The ventilation system that served the dormitory buildings was a packaged unit similar to the large air conditioners, but these were gas fired heating and ventilating units (HVU) only. The units were approximately 1.5 cfm/sq. foot, capacity each for the area served.
- C. The dormitory buildings also had numerous small fans that served the sleeping areas only, and supplemented the HVU units. There were between 6 and 8 fans for the sleeping areas, which added an additional 8-12 cfm per square foot. Keep in mind; these fans all add additional heat to the space when they are operating.

ALTERNATIVES AVAILABLE:

- A. It is possible to add additional air conditioning to the dormitory buildings and at the chow hall. There are numerous alternatives available.
- B. The least expensive would be to add refrigerant coils to the existing HVU located in each un-air conditioned building. The cooling coils could be added to the existing duct work and the condensing units would be located outdoors close to the HVU units. I estimate 12,000 cfm capacity cooling coils, which is approximately 30 tons additional capacity for each half of the building. This is approximately \$120,000 to add air conditioning for each half of the building. Each Dormitory Building contains 8 dormitories total in each building. The calculations are based on 4 dormitories or half of each building. This number can be decreased by using a different design temperature of 75 degrees. If the goal was only to reduce the interior temperatures to 80 or 85, the cost would be further reduced.
- C. It is also possible to add air conditioning to the dormitory buildings with the use of package roof top units connected to the existing duct system. The capacity would be similar to that as described in paragraph B above. The cost would be approximately \$150,000 for each building, with the majority of the cost extra coming from structural additions.
- D. It is also possible to add smaller Split system DX type of equipment. They could be installed three 10 ton small fan coil units in each dormitory area. These fan coil units would be smaller, lighter, and less noisy. I estimate the cost as \$180,000 for each of the dormitory buildings.

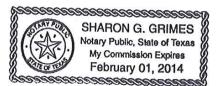
CONCLUSIONS:

- A. The day we observed the buildings, the outside air temperature was cool and the relative humidity was low. The temperatures inside the dormitories were reported to be far above 100 degrees in the summer.
- B. It is relatively easy to air condition the buildings that are not presently air conditioned. There are alternatives available.
- C. The only reason to not air condition the buildings is to save money in the short term or to punish prisoners.

Further, affiant sayeth not.

RONALD W. BROWN, P.E.

SUBSCRIBED and SWORN TO before me, by the said Ronald W. Brown, on this the day of December, 2013, to certify which witness my hand and seal of office.



Notary Public in and for the State of Texas

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 49

ROGER A. CLARK

10207 Molino Road • Santee CA 92071 • Telephone: (208) 351-2458. Fax: (619) 258-0045.

EXPERIENCE

Police Procedures Consultant (self employed)

I have been certified by Federal and State courts as expert in jail and police procedures in Federal and State Courts. I select my cases carefully and have consulted in approximately 1075 cases thus far since my retirement from the Los Angeles County Sheriff's Department.

Substitute Teacher, Madison School District

I substitute teach at all levels in the school district (elementary to high school). As a volunteer, I wrote and managed a \$85,000.00 federal grant for our Central High School. This grant is in its sixth year and has generated \$510,000.00 for the school.

District Liaison, State of Idaho Department of Juvenile CorrectionsAugust 1, 1995 to March 1, 1997.......**1 year, 7 months**

I represented the new Department of Juvenile Corrections to the ten counties in the Seventh Judicial District. As such, I worked closely with Probation Officers, County Commissioners, Judges, other state agencies, private care providers, etc. in the implementation of the new Idaho Juvenile Corrections Act of 1995. I wrote or participated in the writing of several federal grants for the District. I conducted training - both formal and informal - and developed a series of new therapy programs for juveniles with private care providers. I also served as the Director of the Detention Center and the State Placement Coordinator during this time.

Los Angeles County Sheriff's Department

December 1, 1965 to March 31, 1993......27 years 4 months

Note: In 1993 the Los Angeles County Sheriff's Department had 7,000 sworn and 3,000 civilian personnel and a daily County Jail inmate population of 23,000.

Service as a Lieutenant (15 Years, 0 Months):

1. Field Operations Region I NORSAT

11/15/87 to 3/31/93 **64 months**

I commanded a specialized unit created to investigate, locate, observe and arrest major (career) criminal offenders. This unit was designed as a multijurisdictional effort for the cities in the northern region of Los Angeles County. The command consisted of four (4) Sergeants, seventeen (17) Deputies, four (4) Police Officers, twenty five (25) Reserves, and three (3) civilian employees. The 1992 budget set at \$1.5 million. The arrest rate averaged 500 career criminal arrests per year with a 97% conviction rate and no shots fired (on either side) for 61 consecutive months.

Significant contributions while assigned at this Bureau were:

- Increase in participating police agencies.
- Direct participation with corporate (private) agencies.
- Formation of a reserve and volunteer unit.
- Establishment of NORSAT Foundation private funding.
- Computerization of the unit.
- Promotion of fourteen personnel.
- Fleet expansion from 13 to 28 vehicles (donated).
- Formation of the DEA Valley Task Force.
- Field Operations Directive 89-3.

2. Executive Offices Reserve Forces Bureau

05/01/84 to 11/15/87 **42 months**

I was the administrative officer to a specialized bureau responsible for coordinating the activities of 1,000 sworn reserve personnel, 900 civilian

volunteers, and 450 law enforcement explorer scouts. The Bureau identifies programs for their effective utilization throughout the Department; develops and tracks training programs; sponsors activities designed to promote growth and keep morale at high levels.

Significant contributions while assigned at this bureau are:

- Total restructure of the Academy training process for reserve Deputies.
- Implementation of upgrade programs to move lower level reserves to level I status.
- Departmental Reserve Certification procedures.
- Annual leadership seminar.
- The Reserve News, a nationally recognized police magazine.
- Computerization of the Bureau.

3. Field Operations Region I Crescenta Valley Station 04/01/80 to 05/01/84 49 months

Crescenta Valley Station is a full service police facility of 100 personnel serving a population of 50,000 (including the Contract City of La Canada-Flintridge) and a total area of 250 square miles. During my four years service at this facility I served in every management role:

- **Nine months** as the Station Commander during an extended absence by the Captain (08/01/83 TO 05/01/84).
- **Sixteen months** as the Operations Lieutenant (03/01/82 TO 08/01/83).
- **Twelve months** as the station Detective Bureau Commander (03/01/81 to 01/01/82).
- Twelve months as a Watch Commander (04/01/80 to 03/01/81).

Significant contributions while assigned at this command are:

- Negotiation of an enhanced city contract (at a savings to the City).
- Formation of a volunteer community support group.
- Development and implementation of an integrated community emergency response plan.
- High School undercover narcotics operation.
- Restructure of the Station Detective Bureau.
- The annual station picnic, which was effective in boosting station morale.

4. Custody Division Central Jail

04/01/78 to 04/01/80 **24 months**

The Los Angeles County Central Jail is the largest jail facility in the State of California, with a daily inmate population of seven thousand (7,000), an assigned staff of six hundred (600), and two hundred (200) civilian personnel. My service at this command was equally divided into two major assignments:

- Training and Logistics Lieutenant (04/01/79 to 04/01/80).
- Watch Commander (04/01/78 to 04/01/79).

Significant contributions while assigned at this command are:

- "Hot Fire" Training program, which is now a State (POST) mandated training module for all custody personnel throughout California.
- The "Defend in Place" fire safety operational plan for jail facilities.
- New fire safety specifications for jail bedding and mattresses.
- The development of fire safe jail mattress material.
- The development of a facility emergency response plan.
- The computerization of training, timekeeping, and scheduling for the facility (800 sworn and 200 civilian personnel).
- "Spouse day at CJ"--A program for spouses of employees.

Service as a Sergeant (6 Years, 4 Months):

5. Administrative Division Federal Surplus Property 01/12/76 to 04/01/78 27 months

This program was entirely my idea and developed while I was assigned at my previous assignment (Emergency Operations Bureau). The unit provides millions of dollars in free federal excess and surplus food and property from clothing to heavy equipment and aircraft to the department each year. I am very proud of this contribution to the Department.

6. Patrol Division Emergency Operations 02/01/74 to 01/12/76 23 months

I was among the original personnel that formed this unit which blended the activities of the Department's planning unit with emergency operations planning and preparation. I was assigned as the Personnel and Logistics Sergeant.

Significant contributions while assigned at this command are:

- Formation of a new County Emergency Operations Center.
- Participation in the 1974 Federal earthquake studies of Los Angeles County.
- Development of the Department's specialized Field Command Post equipment.
- Development of the Department's Field Booking Team.

7. Patrol Division

Civil Defense Bureau 12/01/73 to 02/01/74 **02 months**

I was assigned to this unit to facilitate the orderly transition into the new Emergency Operations Bureau.

8. Patrol Division

San Dimas Station 12/12/72 to 12/01/73 **12 months**

I performed all the duties of a Watch and Patrol Sergeant. I also frequently served as the Watch Commander.

9. Technical Serviced Division

Communications Bureau 12/01/71 to 12/12/72 12 months

I served as the Watch Commander in The Sheriff's Department's old radio room located at the Hall of Justice, and assisted in the transition to the existing communications facility.

Service as a Deputy (6 Years, 0 Months):

10. Patrol Division

San Dimas Station

Detective Bureau 01/01/70 to 12/01/71 **23 months**

I served as a Station Detective assigned to the evening watch. I handled the first response to all crimes requiring investigations. I processed all evening juvenile matters, prepared criminal complaints and juvenile petitions.

11. **Patrol Division**

San Dimas Station Patrol 01/29/68 to 01/01/70 24 months

I performed all duties assigned to Station Patrol: Jailer, Desk, Watch Deputy, Patrol, and Traffic.

12. Technical Services Division

Transportation Bureau 11/01/67 to 01/29/68 **02 months**

I was temporarily assigned to the Beverly Hills Municipal Court pending my assignment to a Patrol Station.

13. Custody Division

Central Jail 05/06/66 to 11/01/67 **18 months**

I returned to my previous assignment at the Central Jail after graduation from the Academy. I performed all aspects of a Custody Deputy i.e. Module Officer, Prowler, Control Booth, High Power, etc.

14. Administrative Division

Academy 01/17/66 to 05/06/66 **04 months**

I was a Sheriff's trainee assigned to Class #110.

15. Custody Division

Central Jail 12/01/65 to 01/17/66 **01 month**

I was a pre-academy Custody Deputy assigned to the Central Jail as an "off the street" Deputy Sheriff.

DEGREES AND CERTIFICATION

P.O.S.T. Command College (Class #5)	POST	1988
Management Certification	POST	1980
Advanced Certification	POST	1975
Associate of Science Degree	Chaffey College	1971

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

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§	4:14-cv-3253
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Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 50

Roger Clark

Police Procedures Consultant, Inc.

10207 Molino Road. Santee, CA 92071 Phone: (208) 351-2458, Fax: (619) 258-0045 rclark9314@aol.com December 16, 2013

Mr. Scott Medlock, Esq. The Edwards Law Firm 1101 East 11th Street Austin, TX 78702

Regarding: Stephen McCollum et al., v. Texas Department of Criminal Justice, et al. Case No.3:12-CV-02037.

Dear Mr. Medlock:

Thank you for retaining me to analyze and render opinions regarding the July 22, 2011 death of Mr. Larry Gene McCollum (Mr. McCollum) while he was incarcerated at Hutchins State Jail (HSJ), and under the aegis of Hutchins Personnel. Pursuant to the requirements of Rule 26, I have studied the Plaintiff's Complaint, reports, correspondence, photographs, training material, deposition transcripts, and other material (as listed in Attachment A) provided to me thus far regarding this case. I have also reviewed the following data:

- The Texas Commission on Law Enforcement Standards and Education (TCLEOSE) Basic Peace Officer Course #1000.
- The Texas Commission on Law Enforcement Standards and Education (TCLEOSE) Basic County Corrections Course #1007.
- Texas Commission on Jail Standards
- The American Correctional Association (ACA) Performance-Based Standards and Expected Practices for Adult Local Detention Facilities (in cooperation with The Commission on Accreditation for Corrections).
- "A Simulation Study of the Psychology of Imprisonment Conducted at Stanford University" (Stanford Prison Experiment by Professor Philip G. Zimbardo) http://zimbardo.socialpsychology.org.

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I am informed that it is possible that additional disclosures may occur. Please be advised that if any additional data is provided for my review, a supplementary report may be necessary in order to express my complete opinion.

It is also necessary to state at the beginning of this report that I do not make credibility determinations in expressing my opinions. That is, where there are differences in the events proffered by the defendants versus those proffered by witnesses, I do not opine for the trier of fact regarding who are the more believable witnesses. The resolution of any such conflicts are obviously within the purview of a jury to decide.

Brief Overview of Events and Commentary:

It must be stated here that the Plaintiff's Complaint provides a more detailed summation of events and facts and I have observed that they have been fundamentally supported by the subsequent deposition testimony and other material provided through the discovery responses. The purpose of this brief commentary is to provide a context for my opinions as expressed below:

On June 24, 2011, Mr. McCollum was booked into the McLennan County Jail (MCJ) as he awaited transfer to Hutchins State Jail (HSJ), where he would serve a two-year sentence for forgery. At his time of intake at MCJ, Mr. McCollum was medically screened and documented as suffering from hypertension and diabetes and was morbidly obese (333Lbs./5 feet 11 inches tall). During his three week incarceration at MCJ, he had no other medical problems. On July 15, 2011, Mr. McCollum was transferred from the MCJ to HSJ without incident.

Upon arriving at HSJ, Mr. McCollum was given a brief medical evaluation by the facility nurse and thence assigned to a general population dorm, C7. At the time of his intake, Mr. Ananda Babbili, the HSJ staff physicians's assistant, changed Mr. McCollum's daily medication from Clonidine to Hydrochlorothiazide (a diuretic used to treat hypertension) without any physical examination. Additionally, it is important to note here that Mr. McCollum was not given any specific instructions regarding his medical condition and no medical orders regarding his physical condition (other than changing his medication) and needs were provided to the prison custody staff – including any specific instructions regarding his medical needs to the staff in charge of Unit C7. According to testimony, the HSJ has an average inmate count of approximately 2,000 inmates. Unit C7 housed approximately 40 inmates in a bunk-bed configuration. Despite his medical condition and physical girth (333 pounds), Mr. McCollum was nonetheless assigned to sleep on a top bunk.

Temperatures during the month of July, 2011 had been consistently high (as was common for that time of year in Texas), but had become exceptionally hot in July and on July 21st with a reported heat index (an amalgam of temperature and humidity) in C7 possibly as high as 120 - 130 degrees. None of the inmate living areas within HSJ were air conditioned, and there was no medical staff on duty after 6:30 p.m.

At approximately 2 a.m., Mr. McCollum was discovered unresponsive and was shaking uncontrollably in his bunk. (According to the Plaintiff's Complaint, Officer Richard Clark, who was working the C7 dorm, was notified by Mr. McCollum's cell mate that Mr. McCollum was shaking.) Officer Clark testified that he noted Mr. McCollum's medical crisis at approximately 2:10 a.m. and observed that Mr. McCollum was convulsing. Officer Clark has also testified that at that point in the sequence of events he initiated the HSJ policy (as he had been trained) regarding sick inmates which was to first call for a video camera to record the event (a camera apparently never arrived during this incident), and then call for his supervisor (Sergeant Karen Tate) who would respond and give further orders.

I have noted in the record that according to Officer Clark, the HSJ policy and procedure is that even during an obvious medical emergency (as was the case for Mr. McCollum), it is not the HSJ policy or procedure to immediately call 911 – even though no medical staff are on duty after 6:30 p.m. Accordingly, Officer Clark testified that after initiating the existing HSJ policy (as he had been trained) regarding medical emergencies, Officer Clark returned to Mr. McCollum's cell, and continued to watch over him, so that he would not fall off his top bunk. (Because of his weight, it was apparently too difficult to get him off the top bunk) In this regard, Officer Clark has testified that 911 *could not be called without permission from the facility supervisor*: (Emphasis added.)

- Q. What did the -- what did you tell the officer in the picket?
- A. I needed a supervisor, video camera, additional staff.
- Q. Did you tell him what the problem was, the officer in the picket?
- A. No.
- Q. Okay. You didn't say like, this guy's having a seizure?
- A. No.
- Q. You didn't ask him to call 911 or...
- A. Well, we -- we can't do -- we can't dial 911.
- Q. You've worked in the picket, I assume.
- A. Yes.
- Q. You can't dial 911 from the picket?
- A. No.
- Q. Do you know why you can't call 911 from the picket?

- A. The only one who can dial outside of the unit is H Control.
- Q. And where is H Control?
- A. It's the control right out -- right out here attached, just before you go through the doors to the rest of the unit.
- Q. It's in a separate building from the C Building?
- A. Yes.
- Q. Okay. And that's the only place that has an outside line?
- A. Yes.
- Q. Can you call the H Building from the picket?
- A. Yes.
- Q. So someone from the picket could tell someone in H Building to call 911?
- A. No, we can't do that. *It has to be a lieutenant, is the one that makes the final decision whether to dial 911.*
- Q. Okay. So the only person who can make who can make the decision to call 911 is the lieutenant?
- A. Yes. (Clark Deposition, Pages 59-60. Emphasis added.)

Officer Clark testified that he waited for approximately 10 minutes for Sergeant Tate to arrive at the dorm. Sergeant Tate has testified that when she arrived, she observed Mr. McCollum convulsing, and he appeared to be seizing. Although Sergeant Tate recognized that Mr. McCollum needed urgent medical attention, she did not call 911, but instead notified her supervisor, Lieutenant Sandrea Sanders.

Upon being advised of the medical crisis, Lieutenant Sanders did not order that an ambulance be called immediately but opted to respond to C7 while Mr. McCollum continued to convulse and suffer. Lieutenant Sanders finally arrived, and testified that she also recognized that Mr. McCollum was non-responsive, excessively warm, and shaking. It is uncontested in the record that 911 had not even been discussed as an option up to this point. Instead of calling 911 (according to policy Lieutenant Sanders had the authority to do so), she (Lieutenant Sanders) called a prison facility that was located over 100 miles away and spoke with their on-duty nurse (someone not authorized to make medical diagnoses or prescribe treatment). Finally, at approximately 3:00 a.m., Lieutenant Sanders had the H-Building call 911 for a medical unit - approximately an hour after Officer Clark first became aware of Mr. McCollum's medical emergency. Paramedic personnel did not arrive at the facility until approximately 3:15 a.m. - over one hour after Officer Clark first became aware of Mr. McCollum's medical emergency. Because of his obesity, personnel also had difficultly rendering first aid and even getting Mr. McCollum off his assigned top bunk. When this was finally accomplished, Mr. McCollum was transported to Parkland Hospital via ambulance, where he arrived with a

recorded body temperature of over 109.4 degrees, slipped into a coma and succumbed to heat stroke complications (hyperthermia) six days later.

Opinions Thus Far:

- 1. In the United States the reverence for life is a fundamental value of paramount importance. This principle is taught to all custody officers (both Federal and State) as a value at the very heart of the acceptable and expected professional standard of care. Training given to administrators and officers includes the reality that the reverence for life is an ethical, moral and legal core value imbedded in the Constitution and is taken by oath as an obligation by those given custodial powers. Custody Officers are also trained that depriving a person of freedom in any capacity is one of the most serious and sensitive responsibilities that custody officers have. In depriving a person of freedom, officers must weigh the right of an individual to personal liberties against the right of the community at large to be safe and secure. Once a citizen is taken into custody, a whole new set of responsibilities emerges. These include the care and safety as well as the constitutional and statutory rights of every prisoner. Consequently, custody officers are trained that they are lawfully responsible for the care and safekeeping of individuals in their custody and are liable under criminal and civil law for the safekeeping and standard of care of those persons. In my opinion, the death of Mr. McCollum was totally preventable and the conduct of all of the involved HSJ administrators, supervisors and staff demonstrated a shocking deliberate callus disregard for his life and safety for which neither the facility policy and procedures nor the personnel involved should be excused or forgiven.
- 2. In my opinion, all HSJ personnel (including medical and custodial staff) were given obvious and sufficient cause to closely monitor Mr. McCollum's health from the moment he entered into the HSJ especially in view of the on-going heat wave. This did not occur. They were aware that he was obese, they were aware that he was diabetic, and they were aware that he had hypertension and was taking a prescribed diuretic which caused fluid loss. Given the totality of circumstances and the knowledge HSJ personnel had of Mr. McCollum's health disabilities, procedures should have existed

- that would have, at the minimum, placed him in a housing unit that had air conditioning and enhanced medical monitoring.
- 3. In my opinion, Mr. McCollum's obvious susceptibility to hyperthermia injury and/or death was not solely restricted to the HSJ medical staff (although they clearly understood the consequences and risks). Hyperthermia is a condition covered in all custodial first aid curriculums. In this case it is clear that Mr. McCollum's physical symptoms and distress were so obvious that they were a matter of simple common sense among the entire staff. The obvious lack of concern by the HSJ personnel for Mr. McCollum's life in this case was shocking and nothing less than deliberately indifferent.
- 4. There was no security reason to require a security supervisor (i.e. Sergeant Tate and Lieutenant Sanders) to evaluate an inmate before calling 911 when there is no medical staff available at the prison. While a security supervisor should be notified 911 has been called, waiting on a security supervisor who has no medical training beyond first aid to evaluate an inmate before calling 911 simply delays emergency medical care, effectively denying prisoners such as Mr. McCollum critically needed medical attention for serious conditions.
- 5. The Texas Department of Criminal Justice (TDCJ) overseas multiple prisons and jails. The medical emergency policies in place at Hutchins State Jail are also reviewed and confirmed by the TDCJ. In this case Robert Eason, who is directly in charge of HSJ, testified that if Mr. McCollum's condition was indeed considered a medical emergency, then any officer could have and should have called 911. Mr. Eason testified that he determined that the HSJ personnel, including Officer Clark, did not believe Mr. McCollum's condition rose to the level of a medical emergency, and therefore did not call 911. However, Officer Clark belies Mr. Eason's testimony in this regard. Rather, Officer Clark has testified that from his observations Mr. McCollum's condition did in fact require medical attention and would require a 911 call, but he did not do so. It is obvious from the testimony that Clark, Tate, and Sanders knew that Mr. McCollum was suffering convulsions, was unresponsive, and was hot to the touch, and needed emergency medical care. Despite knowing there was no medical staff available at the prison, they made the deliberate choice to wait almost an hour to call 911 while Mr. McCollum

continued to convulse, remain unresponsive, and hot to the touch. The facts of this incident clearly demonstrate that the HSJ training and policies regarding medical emergencies are fundamentally inadequate and broken:

- Q. Okay. Did -- did you think he was in pretty bad shape when you saw him?
- A. Yes.
- Q. You could tell he needed medical attention?
- A. I'm not a nurse or anything. That's an opinion on whoever is -- is there at the time. I --
- Q. But you knew -- I'm sorry.
- A. It looked like he needed -- needed -- well, I'm not sure exactly what he needed, but...
- Q. But from looking at him, you knew that he was having a medical problem, and that it was beyond your ability to help him because you -- as we talked about previously, you've only had basic first-aid training, right?
- A. Yes.
- Q. So you knew that he needed medical help at that time?
- A. Yes.
- Q. Okay. At least to be evaluated, because you couldn't tell what the problem was?
- A. Yes. (Clark Deposition, Page 52. Emphasis added.)
- 6. I have noted that HSJ has proffered that they have been ACA inspected and certified. However, this in no way excuses the HSJ for Mr. McCollum's preventable death. In fact, his death occurred within just one week of his incarceration at their facility and as stated by those involved occurred pursuant to their training, policies and procedures. Such facts apparent in this incident are clearly contrary to the ACA standards. In my opinion, the ACA standards and statements of best practices are among the best expressions of necessary and required custodial conduct to be found anywhere. It is deeply troubling to be acquainted with the ACA standards and then contrast them with the documented events regarding Mr. McCollum's suffering and death due to hyperthermia. Moreover, HSJ clearly does not comply with the ACA standards regarding temperature control, which require temperatures to be capable of

being raised or lowered to maintain a comfortable, or even safe, temperature.

- 7. Another unacceptable argument proffered in this case is that HSJ custody officers didn't realize that that Mr. McCollum was having a "medical emergency," and they even had trouble during depositions defining what a "medical emergency" is. Additionally the HSJ has an established policy of denying immediate medical care in the event of an inmate seizure, and routinely let seizures resolve themselves rather than call paramedics when medical personnel are not on duty. Such policies are clearly below the standard of care. This training is very adequately provided as part of the (TCLEOSE) Basic County Corrections Course #1007. When there is no medical care available onsite, no competent correctional officer would consider a "seizure" a minor medical event where medical attention can be delayed until the morning. It is shocking this would be considered an acceptable and common practice at HSJ. The HSJ staff cannot be excused for such incompetence and it is a fundamental necessity for all corrections officers to know when to provide medical care.
- 8. As stated above, in my opinion, the HSJ existing policies and procedures regarding inmate medical risks, needs, and care are totally inadequate and did not meet the required standards/best practices or the professional standards of care including the claimed ACA certification. This includes (but not limited to) the ACA standards and expected practices as stated below and which are in harmony with all State and Federal codes across the nation:

• Environmental Conditions: 4-ALDF-1A-20:

(Temperature and

Humidity are mechanically

raised or lowered to

acceptable comfort levels.)

Staffing: 4-ALDF-2A-15: (Staffing

of qualified personnel who can meet medical needs.)

Reception: 4-ALDF-2A-19 and 4-

ALDF-2A-21: (Immediate

medical screening

required.)

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• **Classification & Separation**: 4-ALDF-2A-30 and 4-

ALDF-2A-32: (Housing according to medical need.)

Training & Staff Development 4-ALDF-7B-08, 4-ALDF-

7B-09, and 4-ALDF-7B-10. (All facility staff require CPR/first aid

training.)

- 9. The Plaintiff's Complaint documents a series of preventable heatrelated deaths of inmates while incarcerated by the State of Texas
 Prison System similar to the death of Mr. McCollum. I cannot
 understand how such a cruel and inhumane treatment could continue
 to be tolerated and repeated within the State of Texas Penal System.
 Clearly, without corrective actions, they will continue to occur. Air
 conditioning is an obvious necessity and should have been installed
 at the HSJ years before Mr. McCollum's Death. However, even
 without the existence of an air conditioning system, Mr. McCollum's
 death cannot be excused because obvious and well known
 precautions should have been immediately implemented when the
 heat wave occurred. They included at a minimum:
 - Declaring a facility heat-related emergency that automatically specifies pre-planned changes in staffing, treating, re-locating and monitoring of the inmate population.
 - Policies and procedures in place mandating the evacuation of inmates housed in the hot living areas and relocate them to a medically approved safe and cool buildings/dorms.
 - Inmates such as Mr. McCollum should have been predesignated as medically fragile and removed from their obviously heat-intensive housing environment in C7 and transferred to cooler housing – even if it required a transfer to an air conditioned jail facility.
 - During weather cycles of intense heat, increased physical monitoring of all inmates by staff HSJ should have occurred.
 - Medical staff should have been assigned to the facility on a round-the-clock basis with additional required

- inspections by medical personnel of inmate housing units.
- Providing plentiful methods and means for inmates to cool down, i.e. providing plentiful ice water, fans, showers, etc. throughout the entire facility and especially within the living areas.
- A clear policy and expectation for any staff to call 911 for an immediate emergency response upon any observed medical emergency.
- 10. The prison is deficient in that it does not maintain an activity log that would document the efforts of the staff to mitigate the effects of the heat such as providing ice water, providing additional cold showers, moving inmates to air conditioned areas of the prison, etc. Recording such activities are fundamental to the competent administration of any correctional facility.
- 11. The HSJ and all state facilities like it should have had air conditioning capabilities for all inmate housing units.

My Qualifications for Reviewing this Case:

My opinions are based in part on my training, professional experience and education. I am a twenty-seven year veteran of the Los Angeles County Sheriffs Department (LASD). I was hired on December 1, 1965, and I retired from active service on March 31, 1993. My career included six years at the rank of Deputy Sheriff, six years as a Sergeant, and fifteen years as a Lieutenant. I retired holding a California Peace Officer Standards and Training (POST) Advanced Certificate, and I am a graduate of the POST Command College (class #5).

During the course of my service with the department, I had a wide range of duties. Those duties included an 18 month assignment as a staff jail deputy and two years as an Administrator/Lieutenant in the same jail facility (Men's Central Jail). I also served on the department as a patrol officer, field supervisor, jail watch commander and administrator, station watch commander and commanding officer of investigative units. I was a field training officer while assigned as a patrol deputy, and I trained new officers in POST and department approved patrol procedures, field investigations, apprehension techniques, and emergency procedures.

I was a Station Detective and, as such, reviewed and assessed cases passed on to me by the patrol officers. Those cases included possible complaints relating to both misdemeanor and felony crimes. They frequently required follow-up investigations and interviews before the exact nature of the case could be determined. As a field officer and detective, I was trained in interview and interrogation methods and subsequently trained other officers.

Among other assignments as a Sergeant, I supervised field officers and station detectives as they took complaints and conducted preliminary investigations regarding criminal and administrative matters.

As a Sergeant and as a Lieutenant, I served on the training staff of the Los Angeles County Sheriffs Department's Patrol School which taught the POST accepted patrol tactics, and investigation and apprehension methods.

As a Watch Commander and as a Lieutenant, I responded to, investigated, and reported on the use of force and officer involved shootings. I was also assigned by my Department to sit as a member of Departmental review committees regarding the reasonable or unreasonable use of force and tactics.

As stated above, during my career I was assigned to the Los Angeles County Men's Central Jail (MCJ) for a period of 18 months as a line officer. Upon my subsequent promotion to Lieutenant, I returned to the same facility approximately 10 years later. During that time I was assigned as a Jail Watch Commander, and as the Facility Training and Logistics Administrator. At the time of my assignment, the MCJ held a daily population in excess of 7,000 inmates, including a hospital, which was serviced by a staff of more than 900 sworn and civilian personnel.

During my assignment as the Administrative Lieutenant of the Department's Reserve Forces Bureau, I worked closely with the State of California Peace Officer Standards and Training in revamping our Reserve Academy to bring it into state compliance. This process gave me an expertise in the POST Basic curriculum. I also supervised the training of cadets at our Reserve Training Academy. They were taught proper investigation, interview, and apprehension procedures. Among other topics, I lectured the Reserve Academy on the POST syllabus: "The Legal and Moral Use of Force and Firearms."

During the 1984 Olympics held in Los Angeles, I was assigned and served as the Department's Intelligence Officer at the Los Angeles Olympics Emergency Operations Center.

During the last five and one-half years of my career, I commanded a specialized unit known as the North Regional Surveillance and Apprehension Team (N.O.R.S.A.T.), which was created to investigate, locate, observe and arrest major (career) criminals. I held this position until my retirement from the Department on March 31, 1993. Criminals investigated and arrested by N.O.R.S.A.T. included suspects involved with homicide, robbery, kidnaping, extortion, burglary, major narcotics violations and police corruption. The majority of our cases were homicide cases, including the murder of police officers. Arrests frequently occurred in dynamic circumstances including crimes in progress.

My unit also conducted major narcotics investigations including undercover narcotics buys, buy-busts, and reverse stings. We frequently deployed at the request of investigative units, such as Narcotics, which provided the initial investigative leads for our operations. These narcotics cases usually involved multiple kilogram quantities of drugs and amounts of money ranging from one hundred thousand to more than one million dollars.

Approximately 80% of cases assigned to N.O.R.S.A.T. were active Homicide investigations. In that regard, the unit processed under my command and supervision, various aspects (depending on the complexity of the cases involved) of approximately 1,000 Homicides ranging from deaths of police officers to serial homicide suspects. Additionally, the majority of the 700 cases for which I have been retained as a consultant (since 1993) have involved injuries or deaths connected with some aspect of force during either apprehension or while in police custody.

During the first three months of my command of N.O.R.S.A.T., the unit had three justifiable shooting incidents. From that time, and over the next five years of my command, N.O.R.S.A.T. established a remarkable record of more than two thousand arrests of career criminals without a single shot fired – either by my officers or by the suspects whom we arrested.

Many of these suspects were armed and considered to be very dangerous. Some were apprehended during the course of their crimes and were very prone to use firearms to escape apprehension.

This record of excellence was accomplished through the use of proper tactics, management and supervision of personnel, training in correct apprehension methods and adherence to the moral and ethical standards endorsed by California POST and my Department. These methods and principles are also embraced by every state training commission of which I am aware, as well as the national standards established by the U.S. Department of Justice.

As a result of my position and record as the commanding officer of N.O.R.S.A.T., I was assigned to author Field Operations Directive 89-3, "Tactical Operations Involving Detective Personnel." This order remained in force 20 years (until September 30, 2009), and included the basic standards and considerations with which investigative officers must comply in the event of a tactical deployment such as the dynamic entry into a building for the purpose of an arrest and/or seizure of evidence.

Since my retirement, I have testified as an expert on use of force, jail procedures and jail administration, investigations, police procedures, police tactics, investigative procedures, shooting scene reconstruction, and police administration in Arizona State Courts, California Courts, Washington State Courts and Federal Courts in Arizona, California, Colorado, Illinois, Indiana, Louisiana, Missouri, Oregon, Nevada, New Mexico, Ohio, Pennsylvania, Texas, Utah and Washington. I have testified before the Los Angles Police Department Board of Rights and the Los Angeles County Civil Service Commission. I have testified before the Harris County (Texas) Grand Jury. I have also submitted written opinions in matters before Alaska, Florida, Idaho, Montana, North Carolina, Oregon and Wyoming Federal and State Courts.

I was selected (January 20, 2007) to present on the topic of: "Police Experts" at the National Police Accountability Project held at Loyola Law School, Los Angeles, California. I was selected (September 23, 2010) to present on the topic of: "Using POST Modules to Establish Police Officer' Standard of Care" at the National Accountability Project, National Lawyers Guild Convention, New Orleans, Louisiana. I was selected (March 30, 2012) to present to the Kern County Public Defenders in Bakersfield, California, on the topics of "Ethics, Police Investigations, the California POST Curriculum, and the M26 and X26 Taser weapons". On August 7, 2013 I was invited and presented to the Texas Civil Rights Project (TCRP) 2013 Annual Legal Summit in Austin, Texas on the topic: "Ethically Working with Experts from the Prospective of a Police Expert."

I have worked on several projects with the Paso Del Norte (El Paso, Texas) Civil Rights Project, and the Texas Civil Rights Project (Austin, Texas). As a result of my expert testimony in Border Network, et al. v. Otero County, et al., Case No. 07-cv-01045 (D.N.M. 2008), a federal court issued a temporary injunction to stop the illegal and widespread immigration raids in Chaparral, New Mexico, implemented pursuant to Operation Stonegarden. The case resulted in the adoption of a model policy for inquiring into a person's immigration status, which has been adopted nationwide and has also been presented to the United States Senate, the Secretary of Homeland Security, and other government officials seeking to reform immigration enforcement.

I have been recognized, and my expert report was quoted by the United States Court of Appeals for the Ninth Circuit as an expert in Police Administration and Use of Force. Blankenhorn v. City of Orange, et al., 485 F.3d 463, 485 (9th Cir. 2007). The Ninth Circuit also drew from my expert report in a second published case involving Police Detective Investigations. Torres, et al v. City of Los Angeles, et al., 540 F.3d 1031, 1042-43 (9th Cir. 2008). The Torres case was appealed to the U.S. Supreme Court and returned for trial. The Ninth Circuit also drew from my expert reports regarding credible threats justifying the use of force, Hayes v. County of San Diego, - F.3d -, 2011 WL 2315191 (9th Cir. 2011), and Young v. County Of Los Angeles, 2011 WL 3771183 (9th Cir. 2011). The Ninth Circuit also drew from my expert reports regarding Jail Administration and Administrative Responsibilities, Starr v. Baca, - F.3d -, 2011 WL 2988827 (9th Cir. 2011). The Ninth Circuit also drew from my expert reports regarding an officer's violation of the 14th Amendment if an officer kills a suspect when acting with the purpose to harm, unrelated to a legitimate law enforcement objective, in A.D., a Minor; J.E., a Minor; Sue Casey, v. State of California Highway Patrol, and Stephen Markgraf, No. 09-16460, D.C. No. 3:07-cv-05483-SI. The Fifth Circuit drew from my expert report regarding search and seizure, investigations and no-knock requirements in Lindsey Bishop and Carolyn Clark, v. Tony Arcuri, City of San Antonio. USDC Court of Appeals, Fifth Circuit, Case No. 11-50010, March 09, 2012. The Ninth Circuit also drew from my expert report regarding the use of impact weapons (PepperBall) on civilians in Nelson v. City of Davis, F.3d , 2012 U.S. App. LEXIS 14140 (9th Cir. 2012).

The California Court of Appeal (Second Appellate District) drew in part from my expert report regarding search warrant service, Macias v. County of Los Angeles, 144 Cal. App.4th 313, 50 Cal. Rptr.3d 364 (2006). The California Supreme Court drew in part from my expert opinion regarding police tactics and the use of deadly force, Chelsey Hayes, a Minor, etc., v. County of San Diego et al., S193997, 9th Cir. No. 09-55644, S.D. Cl. No. 3:07-cv-01738-DMS-JMA.

On February 10, 1989, I was personally commended at the Los Angeles County Hall of Administration by United States Attorney General, the Honorable Edwin Meese III, for my work to establish California Penal Code Section 311.11 (forbidding the Possession of Child Pornography). On February 22, 1993 (at the time of my retirement), Mr. Meese presented a second personal commendation for the success of this critical 5 year effort to bring this law into effect.

I have been found competent by both Federal and State Courts to render opinions as to the duties and responsibilities of police officers regarding their individual and collective responsibilities as occurred in this case. A number of my cases have involved law enforcement officers as civil plaintiffs and as criminal defendants.

Since my retirement I have become an expert in the features and the use of TASER International's products, including the Model M26 and Model X26 ECDs. I own each, along with the download software. I have reviewed all the TASER training materials and am familiar with the risks and tactics associated with these potentially lethal devices. I have qualified as an expert on TASER products and testified both in deposition and before juries on their usage. Two published examples are Lee v. Nashville, 596 F. Supp. 2d 1101, 1121-22 (M.D. Tenn. 2009), and Heston v. City of Salinas, 2007 U.S. Dist. LEXIS 98433, *25-*26 (E.D. Cal. 2007). There are many others.

Attached as Exhibit A is a listing of the material reviewed, Exhibit B is a statement listing my law enforcement qualifications and experience; Exhibit C is my fee schedule; Exhibit D is a listing of matters in which I have testified in the last four years as an expert.

I declare under penalty of perjury that the foregoing is true and correct. Executed December 16, 2013 at Chicago, Illinois.

Roger A. Clark

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 51

2012 Supplement

Performance-Based Standards for Adult Local Detention Facilities (ALDF), 4th Edition

4-ALDF-1A-09

Revised August 2008. Single cells in general population provide at least 35 square feet of unencumbered space. At least 70 square feet of total floor space is provided when the occupant is confined for more than 10 hours per day.

COMMENT: *Unencumbered space* is usable space that is not encumbered by furnishings or fixtures. At least one dimension of the unencumbered space is no less than seven feet. In determining the unencumbered space, the total square footage is obtained and the square footage of the fixtures is subtracted. All fixtures must be in operational position for these calculations.

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Measurement. Observation.

4-ALDF-1A-14

Revised January 2008. Light levels in inmate cells/rooms are at least 20 foot-candles in personal grooming areas and at the writing surface. Lighting throughout the facility is sufficient for the tasks performed. Measurements are documented by a qualified source and are checked at least once per accreditation cycle.

COMMENT: None

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Documentation from a qualified source. Measurement. Observation. Maintenance and repair records. Inmate and staff interviews.

4-ALDF-1A-15

Revised August 2006. (Existing only) All inmate rooms/cells provide access to natural light.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Observation.

4-ALDF-1A-16

Revised August 2006. (Renovation, Addition, New Construction only)

All inmate rooms/cells provide the occupants with access to natural light by means of at least three square feet of transparent glazing, plus two additional square feet of transparent glazing per inmate in rooms/cells with three or more inmates.

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COMMENT: None.

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Measurement. Observation. Housing records and logs. Classification records.

4-ALDF-1A-18-1

Added August 2008. (New Construction Only) Noise levels in housing areas (in other words, dayrooms with adjacent cells or dorms) shall not exceed the following:

- Unoccupied 45 dba (A Scale), building service systems shall be on and in normal operating condition. Mid-frequency average reverberation time (T 60) must be less than 1.0 sec.
- Occupied 70 dba (A Scale) for a minimum of 15 seconds of continuous average measurement in normal operating conditions.

All monitoring shall be conducted in close proximity to the correctional officer's post. If a correctional officer's post is not identified then monitoring shall be conducted at a location considered best to monitor housing noise levels. Measurements shall be conducted a minimum of once per accreditation cycle by a qualified source.

COMMENT: Noise levels in housing areas should be contained to achieve a safe and secure environment for staff and inmates. Building service system's noise within housing areas are sometimes constant and may be difficult to eliminate. Consideration should be given to maintenance of the building systems and use of absorptive treatment materials that meet applicable fire codes. Control of operational noise (in other words, televisions, recreation and group activities, and so forth) should be accomplished administratively.

PROTOCOLS: Policies and procedures. Facility plans/specifications.

PROCESS INDICATORS: Observation. Records. Logs.

4-ALDF-1A-19

Revised August 2007. A ventilation system supplies at least 15 cubic feet per minute of circulated air per occupant with a minimum of five cubic feet per minute of outside air. Toilet rooms, and cells with toilets, have no less than four air changes per hour unless state or local codes require a different number of air changes. Air quantities are documented by a qualified technician not less than once per accreditation cycle.

COMMENT: Accreditation cycle is defined as within the past three years.

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Measurement. Observation. Inmate and staff interviews. Maintenance and repair records. Report from independent source.

4-ALDF-1A-20

Revised August 2006. Temperature is mechanically raised or lowered to acceptable comfort levels.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Measurement. Inmate and staff interviews. Facility logs and records. Maintenance and repair records.

4-ALDF 1C-12

Revised August 2005. Essential lighting and life-sustaining functions are maintained inside the facility and with the community in an emergency.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Facility plans/specifications.

PROCESS INDICATORS: Observation. Facility records and logs.

4-ALDF-2A-01

Revised January 2007. Space is provided for a 24-hour continuously staffed secure control center for monitoring and coordinating the facility's security, life safety, and communications systems. Staff assigned to a control center have access to a toilet and washbasin. There are multiple communication systems between the control center and inmate occupied areas.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Facility plans/specifications. Staff plan and schedules.

PROCESS INDICATORS: Facility records and logs. Observation. Maintenance records. Staff deployment records. Staff interviews.

4-ALDF-2A-02

Deleted January 2007.

4-ALDF-2A-05

Revised August 2010. Inmates classified as medium or maximum security risks are personally observed by an officer at least every 30 minutes on an irregular schedule. Inmates classified as minimum or low security risks are personally observed by an officer at least every 60 minutes on an irregular schedule.

COMMENT: None.

PROTOCOLS: Written policy and procedures. Facility plans/specifications.

PROCESS INDICATORS: Observation. Staff and inmate interviews.

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4-ALDF-2A-13

Revised August 2007. Written policy, procedure, and practice require that the chief security officer or qualified designee conduct at least weekly inspections of all security devices noting the items needing repair or maintenance. The inspections are reported in writing to the warden/superintendent and/or chief security officer.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Inspection forms and schedule.

PROCESS INDICATORS: Facility logs. Completed inspections forms and reports. Documentation of action taken to correct identified deficiencies. Maintenance records.

4-ALDF-2A-21

Revised January 2007. Admission processes for a newly admitted inmate include, but are not limited to:

- recording basic personal data and information to be used for mail and visiting list
- criminal history check
- photographing and fingerprinting, including notation of identifying marks or other unusual physical characteristics
- assignment of registered number to the inmate
- medical, dental, and mental health screening
- screening to detect signs of drug/alcohol abuse
- suicide screening
- inventory of personal property
- secure storage of inmate property, including money and other valuables. The inmate is given a receipt for all property held until release.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Intake and admission forms. Screening forms, Staff training curriculum, Inventory form, Receipt form.

PROCESS INDICATORS: Observation. Inmate records/files. Intake and admission records. Completed inventory forms. Intake records. Completed receipts.

4-ALDF-2A-23 Deleted January 2007.

4-ALDF-2A-34

Revised January 2007. Single occupancy cells/rooms are provided when indicated for the following:

- maximum and close custody
- inmates with severe medical disabilities
- inmates suffering from serious mental illness
- sexual predators
- inmates likely to be exploited or victimized by others
- · inmates who have other special needs for single-occupancy housing

No less than 10 percent of the rated capacity of the facility is available for single occupancy.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Process for periodic review and appeal. Inmate handbook. Inmate orientation materials.

PROCESS INDICATORS: Classification records. Documentation of periodic review and appeal. Inmate interviews.

4-ALDF-2A-35 Deleted January 2007.

4-ALDF-2A-37

Revised August 2008. Confinement of juveniles under the age of 18 is prohibited unless a court finds that it is in the best interest of justice and public safety that a juvenile awaiting trial or other legal process be treated as an adult for the purposes of prosecution, or unless convicted as an adult and required by statute to be confined in an adult facility.

COMMENT: None.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Observation. Interviews (staff, inmates). Admission and housing.

4-ALDF 2A-50

Revised August 2008. There is a sanctioning schedule for rule violations. The maximum sanction for rule violations is no more than 60 days for all violations arising out of one incident. Continuous confinement for more than 30 days requires the review and approval of the facility administrator or designee.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Sanctioning schedule.

PROCESS INDICATORS: Documentation that sanctioning schedule has been communicated to inmates. Inmate interviews. Documentation of facility administrator review or designee and approval.

4-ALDF 2A-51

Interpretation August 2004. The Standards Committee determined that segregation housing does not have to be single celled.

4-ALDF 2A-52

Revised August 2011. Written policy, procedure, and practice require that all special management inmates are personally observed by a correctional officer twice per hour, but no more than 40 minutes apart, on an irregular

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schedule. Inmates who are violent or mentally disordered or who demonstrate unusual or bizarre behavior receive more frequent observation; suicidal inmates are under continuing or continuous observation.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Staffing plan. Log format.

PROCESS INDICATORS: Documentation that sanctioning schedule has been communicated to inmates. Inmate interviews. Documentation of facility administrator or designee review and approval.

4-ALDF 2A-53

Revised January 2005. Inmates in segregation receive daily visits from the facility administrator or designee, and members of the program staff, on request.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Log format.

PROCESS INDICATORS: Documentation of administrator/designee visits and health care visits. Inmate interviews. Completed logs.

4-ALDF 2A-54

Revised August 2007. Staff assigned to work directly with inmates in special management units are selected based on criteria that includes:

- · completion of probationary period
- experience
- suitability for this population

Staff are closely supervised and their performance is documented at least annually. There are provisions for rotation to other duties.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Staff schedule.

PROCESS INDICATORS: Documentation of supervision and rotation of staff. Inmate interviews. Staff interviews.

4-ALDF-2A-55

Revised January 2007. Staff operating special management units maintain a permanent log that contains at a minimum the following information for each inmate admitted to segregation:

- name
- number
- housing location
- date admitted
- type of infraction or reason for admission
- tentative release date
- · special medical or psychiatric problems or needs

Officials who inspect the units, counsel the inmate on his or her behavior, and all releases also use the log to record all visits.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Log format.

PROCESS INDICATORS: Completed log. Inmate records.

4-ALDF-2B-02-1

Added August 2008. Written policy, procedure and practice, in general, prohibit the use of restraints on female offenders during active labor and the delivery of a child. Any deviation from the prohibition requires approval by, and guidance on, methodology from the medical authority and is based on documented serious security risks. The medical authority provides guidance on the use of restraints on pregnant offenders prior to active labor and delivery.

COMMENT: Restraints on pregnant offenders during active labor and the delivery of a child should only be used in extreme instances and should not be applied for more time than is absolutely necessary. Restraints used on pregnant offenders prior to active labor and delivery should not put the pregnant offender nor the fetus at risk.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Escort logs. Inmate records. Medical records.

4-ALDF-2B-03

Revised January 2011 (Mandatory). Four/five point restraints are used only in extreme instances and only when other types of restraints have proven ineffective or the safety of the inmate is in jeopardy. Advance approval is secured from the facility administrator/designee before an inmate is placed in a four/five point restraint. Subsequently, the health authority or designee must be notified to assess the inmate's medical and mental health condition, and to advise whether, on the basis of serious danger to self or others, the inmate should be in a medical/mental health unit for emergency involuntary treatment with sedation and/or other medical management, as appropriate. If the inmate is not transferred to a medical/mental health unit and is restrained in a four/five point position, the following minimum procedures are followed: direct visual observation by staff is continuous prior to obtaining approval from the health authority or designee; subsequent visual observation is made at least every 15 minutes; restraint procedures are in accordance with guidelines approved by the designated health authority; all decisions and actions are documented.

COMMENT: A four/five point restraint secures an inmate's arms and legs (four point) and head (five point). Restraint guidelines include consideration of an individual's physical conditions, such as body weight.

PROTOCOLS: Written policy and procedure, forms.

PROCESS INDICATORS: observation, facility records and logs, interviews with inmates and staff, documentation of approval(s) and observation.

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4-ALDF-2B-06

Revised January 2008. The facility maintains a record of routine and emergency distribution of security equipment. Firearms, chemical agents, and related security equipment are inventoried at least monthly to determine their condition and expiration dates.

COMMENT: Written policy should delineate the process by which security equipment is distributed from the primary issue point to control points for both routine and emergency issuance. The policy should address how the facility tracks the issuance of security equipment (written log, chit system, and so forth) and the accountability of security equipment at the end of the shift.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Completed distribution records. Completed inventory forms.

4-ALDF-2C-01

Revised January 2007. Procedures guide searches of facilities and inmates to control contraband.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Search procedures.

PROCESS INDICATORS: Observation. Facility records and logs. Inmate and staff interviews.

4-ALDF 4A-09

Revised August 2004. Therapeutic diets are provided as prescribed by appropriate clinicians. A therapeutic diet manual is available in health services and food services for reference and information. Prescriptions for therapeutic diets should be specific and complete, furnished in writing to the food service manager, and rewritten annually, or more often as clinically indicated.

COMMENT: Therapeutic diets are prepared and served to offenders according to the orders of the treating clinician or as directed by the responsible health authority. Therapeutic diets should be kept as simple as possible and should conform as closely as possible to the foods served other offenders.

PROTOCOLS: Written policy and procedures. Diet manual. Diet request form.

PROCESS INDICATORS: Health records. Diet records or forms. Observation. Interviews.

4-ALDF 4A-12-1

Added August 2011. All staff, contractors, and inmate workers who work in the food service department are trained in the use of food service equipment and in the safety procedures to be followed in the food service department.

COMMENT: None.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Training records. Inmate records. Observation. Staff and inmate interviews.

4-ALDF 4A-16

Revised August 2005. Stored shelf goods are maintained at 45 degrees to 80 degrees Fahrenheit, refrigerated foods at 35 degrees to 40 degrees Fahrenheit, and frozen foods at 0 degrees Fahrenheit or below, unless national or state health codes specify otherwise. Temperatures are checked and recorded daily.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Report and log formats.

PROCESS INDICATORS: Observation. Measurement. Documentation of daily temperature checks.

4-ALDF-4B-02

Revised August 2007. Written policy, procedure, and practice provide for the issue of suitable, clean bedding and linen, including two sheets, pillow and pillowcase, one mattress, not to exclude a mattress with integrated pillow, and sufficient blankets to provide comfort under existing temperature controls. There is provision for linen exchange, including towels, at least weekly. Blanket exchange must be available at least quarterly.

COMMENT: None.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Documentation of issue and exchange.

4-ALDF 4C-24

Interpretation January 2004 (Mandatory). The criterion for testing for venereal diseases is at the discretion of the agency's/facility's health authority.

4-ALDF 4C-30

Revised August 2005 (Mandatory). Inmates who are referred as a result of the mental health screening or by staff referral will receive a mental health appraisal by a qualified mental health person within 14 days of admission to the facility. If there is documented evidence of a mental health appraisal within the previous 90 days, a new mental health appraisal is not required, except as determined by the designated mental health authority. Mental health examinations include, but are not limited to:

- assessment of current mental status and condition
- assessment of current suicidal potential and person-specific circumstances that increase suicide potential

- assessment of violence potential and person-specific circumstances that increase violence potential
- review of available historical records of inpatient and outpatient psychiatric treatment
- review of history of treatment with psychotropic medication
- review of history of psychotherapy, psycho-educational groups, and classes or support groups
- review of history of drug and alcohol treatment
- review of educational history
- review of history of sexual abuse-victimization and predatory behavior
- · assessment of drug and alcohol abuse and/or addiction
- use of additional assessment tools, as indicated
- referral to treatment, as indicated
- development and implementation of a treatment plan, including recommendations concerning housing, job assignment, and program participation

COMMENT: None.

PROTOCOLS: Written policy and procedure. Mental health appraisal form.

PROCESS INDICATORS: Health records. Completed mental health appraisal forms. Transfer logs. Interviews.

4-ALDF 4D-05

Revised January 2005 (Mandatory). All professional staff comply with applicable state and federal licensure, certification, or registration requirements. Verification of current credentials is on file in the facility.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Copies of licensure requirements.

PROCESS INDICATORS: Personnel record. Documentation of licensure, certification, or registration. Documentation of current credentials.

4-ALDF-4D-11

Revised August 2008. Unless prohibited by state law, offenders (under staff supervision) may perform familial duties commensurate with their level of training. These duties may include:

- providing peer support and education
- engaging in hospice activities
- assisting impaired offenders on a one-on-one basis with activities of daily living
- serving as suicide companion or buddy, if qualified and trained through a formal program that is part of suicide-prevention plan
- handling dental instruments for the purpose of sanitizing and cleaning, when directly supervised and in compliance with applicable tool control policies, while in a dental assistant's training

program certified by the state department of education or other comparable appropriate authority

Offenders are not to be used for the following duties:

- performing direct patient care services
- scheduling health care appointments
- determining access of other offenders to health care services
- handling or having access to surgical instruments, syringes, needles, medications, or health records
- operating diagnostic or therapeutic equipment except under direct supervision (by specially trained staff) in a vocational training program

COMMENT: None.

PROTOCOLS: Written policy and procedure. Copies of licensure requirements.

PROCESS INDICATORS: Personnel records. Documentation of licensure, certification, or registration. Documentation of current credentials.

NOTE: This standard was incorrectly identified as 4-ALDF-6B-06 in the 2010 Standards Supplement.

4-ALDF 4D-20

Revised January 2005. Due process is ensured prior to a transfer that results in an inmate's placement in a non-correctional facility or in a special unit within the facility or agency, specifically designated for the care and treatment of the severely mentally ill or developmentally disabled. Procedures for transfer comply with federal, state, and local law. In emergency situations, a hearing is held as soon as possible after the transfer.

COMMENT: The following are generally accepted as due process procedures: written notice to the inmate of the proposed transfer; a hearing for the inmate, with the right, unless limited for good cause, to call and cross-examine witnesses; a decision by an independent official not involved in treatment of the inmate, with a statement of the reasons for transfer; and an independent adviser to assist the inmate facing transfer.

PROTOCOLS: Written policy and procedure. State and local law.

PROCESS INDICATORS: Health records. Transfer logs. Interviews.

4-ALDF 4D-22

Deleted August 2005. This standard was deleted because it was a duplicate of 4-ALDF-2A-29. Standards 4-ALDF-4D-22-1 through 4-ALDF-4D-22-8 are still in effect, as originally published.

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4-ALDF-5B-10

Revised August 2006. Excluding weekends and holidays, or emergency situations, incoming and outgoing letters are held for no more than 48 hours and packages (if allowed) are held no more than 72 hours.

COMMENT: An *emergency situation* is defined as any significant disruption of normal facility or agency procedure, policy, or activity caused by riot, escape, fire, natural disaster, employee action, or other serious incident.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Mail records and logs.

4-ALDF-5B-18

Revised January 2007. Procedures for releasing inmates from the facility at the end of their term include, but are not limited to, the following:

- identification of outstanding warrants, wants, or detainers
- · verification of identity
- verification of release papers
- completion of release arrangements, including notification of the parole authorities in the jurisdiction of release, if required
- return of personal property
- verification that no facility property leaves the facility
- arrangements for completion of any pending action, such as grievances or claims for damages or lost possessions
- medical screening and arrangements for community follow-up, where needed, to include medication
- instructions for forwarding or return of mail

COMMENT: None.

PROTOCOLS: Written policy and procedure. Release forms and procedures.

PROCESS INDICATORS: Completed release forms and documents. Facility records and logs. Inmate records. Observations.

4-ALDF 5C-04

Revised August 2004. Segregation units have either outdoor uncovered or outdoor covered exercise areas. The minimum space requirements for outdoor exercise areas for segregation units are as follows:

- group yard modules—15 square feet per inmate expected to use the space at one time, but not less than 500 square feet of unencumbered space
- individual yard modules—180 square feet of unencumbered space

In cases where cover is not provided to mitigate the inclement weather, appropriate weather-related equipment and attire should be made available to the inmates who desire to take advantage of their authorized exercise time.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Facility plans/specifications. Schedules.

PROCESS INDICATORS: Observation. Measurement. Facility logs and activity records.

4-ALDF 5C-20

Revised August 2004. Written policy, procedure, and practice provide that assigned chaplain(s)(whether they be classified employees, contract employees, or volunteers), in consultation with and approval from facility administration, plans, directs, and supervises all aspects of the religious program, including approval and training of both lay and clergy volunteers from faiths represented in the inmate population.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Training curriculum. Plan.

PROCESS INDICATORS: Training records. Religious program records. Facility logs and records. Inmate interviews.

4-ALDF-6B-06

Revised August 2008. Appropriately trained individuals are assigned to assist disabled inmates who cannot otherwise perform basic life functions.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Job descriptions. Staffing plan. Training curriculum.

PROCESS INDICATORS: Staff assignment records. Staff training records. Qualifications of persons assigned to assist disabled inmates.

4-ALDF 6C-09

Revised January 2008. Disciplinary hearings are convened as soon as practicable, but no later than seven days, excluding weekends and holidays, after being charged with a violation. Inmates are notified of the hearing at least 24 hours in advance of the hearing.

COMMENT: None.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Disciplinary records.

4-ALDF 6C-18

Revised August 2005. Inmates may appeal decisions of the disciplinary hearing officer(s) to the administrator or independent authority. The administrator or independent authority must affirm or reverse the decision of the disciplinary hearing officer(s) within 15 days of the appeal. For facilities that are part of an agency with a systemwide appeal process, the decision to affirm or deny the appeal is made within 30 days.

Performance-Based Standards for Adult Local Detention Facilities (ALDF), 4th Edition

COMMENT: None.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Disciplinary records.

4-ALDF-7B-03

Revised August 2007. A criminal record check is conducted on all new employees, contractors, and volunteers prior to their assuming duties to identify whether there are criminal convictions that have a specific relationship to job performance. This record will include comprehensive identifier information to be collected and run against law enforcement indices. If suspect information on matters with potential terrorism connections is returned on a desirable applicant, it is forwarded to the local Joint Terrorism Task Force (JTTF) or another similar agency.

COMMENT: None.

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Personnel records.

4-ALDF 7B-08

Revised January 2005. All new professional and support employees, including contractors, who have regular or daily inmate contact receive training during their first year of employment. Forty hours are completed prior to being independently assigned to a particular job. An additional 40 hours of training is provided each subsequent year of employment. At a minimum, this training covers the following areas:

- security procedures and regulations
- supervision of inmates
- signs of suicide risk
- suicide precautions
- use-of-force regulations and tactics
- report writing
- inmate rules and regulations
- kev control
- rights and responsibilities of inmates
- safety procedures
- all emergency plan and procedures
- interpersonal relations
- social/cultural lifestyles of the inmate population
- cultural diversity
- communication skills
- CPR/first aid
- counseling techniques
- · sexual harassment/sexual misconduct awareness
- · code of ethics

COMMENT: None.

PROTOCOLS: Written policy and procedure. Job descriptions. Training curriculum. Training record forms and formats.

PROCESS INDICATORS: Personnel records. Training records.

4-ALDF 7B-10

Revised August 2005. Written policy, procedure, and practice provide that all new correctional officers receive 120 hours of training during their first year of employment. At a minimum, this training covers the following areas:

- security and safety procedures
- · emergency and fire procedures
- supervision of offenders
- suicide intervention/prevention
- use of force
- offender rights
- key control
- interpersonal relations
- communication skills
- standards of conduct
- cultural awareness
- sexual abuse/assault intervention
- code of ethics

Additional topics may be added at the discretion of the agency or facility.

COMMENT: Since the duties of correctional officers frequently involve most institutional operations, their training should be comprehensive.

PROTOCOLS: Written policy and procedure. Job descriptions. Training curriculum. Training record forms and formats.

PROCESS INDICATORS: Personnel records. Training records.

4-ALDF 7B-10-1

Added August 2005. Written policy, procedure, and practice provide that all correctional officers receive at least 40 hours of annual training. This training shall include at a minimum the following areas:

- standards of conduct/ethics
- security/safety/fire/medical/emergency procedures
- supervision of offenders including training on sexual abuse and assault
- use of force

Additional topics shall be included based upon a needs assessment of both staff and institution requirements.

COMMENT: This training will enable employees to sharpen skills, maintain certification and keep abreast of changes in policies, procedures, and legislative, judicial or executive actions.

Performance-Based Standards for Adult Local Detention Facilities (ALDF), 4th Edition

PROTOCOLS: Written policy and procedure. Job descriptions. Training curriculum. Training record forms and formats.

PROCESS INDICATORS: Personnel records. Training records.

4-ALDF-7B-12

Revised August 2007. Written policy, procedure, and practice provide that correctional officers assigned to an emergency unit have at least one year of corrections and 40 hours of specialized training before undertaking their assignments. Other staff must have at least one year of experience in their specialty within a correctional setting. The specialized training may be part of their first year training program. Officers and staff assigned to emergency units receive 40 hours of training annually, at least 16 of which are specifically related to emergency unit assignment.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Job descriptions. Training curriculum. Training records and formats.

PROCESS INDICATORS: Personnel records. Training records.

4-ALDF-7D-01-1

Added August 2010. The facility/agency shall demonstrate it has examined, and where appropriate and feasible, implemented strategies that promote recycling, energy and water conservation, pollution reduction, and utilization of renewable energy alternatives.

COMMENT: Correctional facilities and programs have the responsibility to implement strategies that allow correctional facilities to be managed in ways that are most cost-effective and deliver superior performance, while improving environmental responsibility and sustainability. This includes recycling (including paper, metal and plastic products), energy conservation (including building insulation, heating and ventilation, temperature controls, vehicle fuel efficiency, water economies, physical plant engineering, and energy measures), pollution reduction (including composting sewer treatment, litter abatement, and carbon emissions), and utilization of renewable energy alternatives (biofuels, solar collection, turbine energy production, and methane collection).

PROTOCOLS: Written policy and procedures.

PROCESS INDICATORS: Observation. Log sheets. Documentation of services.

4-ALDF-7D-06

Revised January 2007. Written policies and procedures describe all facets of facility operation maintenance, and administration, and are reviewed annually. These are available to all employees unless security concerns justify limited access.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Policy and procedure manual. Distribution lists.

PROCESS INDICATORS: Documentation of annual review.

4-ALDF 7D-12

Revised August 2005. The facility or parent agency fiscal process includes an independent financial audit of the facility annually, or as stipulated by statute or regulation, but at least every three years.

COMMENT: None.

PROTOCOLS: Written policy and procedure. Statutes and regulations.

PROCESS INDICATORS: Completed audits.

4-ALDF-7E-02

Revised August 2010. The institution maintains a current, accurate, confidential personnel record on each employee except where state statues require open public records and the personnel record cannot be maintained confidentially. Information obtained as part of a required medical examination (and/or inquiry) regarding the medical condition or history of applicants and employees is collected and maintained on separate forms and in separate medical files and treated as a confidential medical record.

COMMENT: None.

PROTOCOLS: Written policies and procedures. Statutes and regulations.

PROCESS INDICATORS: Personal records.

4-ALDF-7G-01

Added January 2007.

Added new section: Security Threat Groups

Written policy, procedure, and practice require that ongoing, but not less than semi-annually, consultation takes place as determined by the agency or parent agency with the local Joint Terrorism Task Force (JTTF), or another similar agency, on all terrorism matters to include:

- a list of known terrorist inmates in local custody
- intelligence regarding inmates with suspected terrorist ties
- information regarding specific incidents, events, or threats affecting the institution or detention facility that have a possible terrorism connection

COMMENT: Examples of reportable intelligence might include attempts by such inmates to radicalize or recruit among fellow inmates, or efforts to continue contact with terrorist groups in the community. Documentation of the consultations should be determined by agency standards, and may include log books, e-mails exchanged with the JTTF or another like agency, or minutes of telephone calls.

Performance-Based Standards for Adult Local Detention Facilities (ALDF), 4th Edition

PROTOCOLS: Written policy and procedure.

PROCESS INDICATORS: Inmate files/records. Completed logs. Staff interviews. Written correspondence with JTTF or like agency.

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

STEPHEN McCOLLUM, and SANDRA	§	
McCOLLUM, individually, and STEPHANIE	§	
KINGREY, individually and as independent	§	
administrator of the Estate of LARRY GENE	§	
McCOLLUM,	§	
PLAINTIFFS	§	
	§	
V.	§	CIVIL ACTION NO.
	§	4:14-cv-3253
	§	JURY DEMAND
BRAD LIVINGSTON, JEFF PRINGLE,	§	
RICHARD CLARK, KAREN TATE,	§	
SANDREA SANDERS, ROBERT EASON, the	§	
UNIVERSITY OF TEXAS MEDICAL	§	
BRANCH and the TEXAS DEPARTMENT OF	§	
CRIMINAL JUSTICE.	§	
DEFENDANTS	§	

Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 52

SUSI U. VASSALLO, M.D.

Curriculum Vitae

PERSONAL DATA

Born: Austin, Texas, January 27, 1959

Citizenship: USA

Address: 545 First Avenue, Apt 10-C, New York, New York 10016

W: 212-562-3346 C: 646-298-4510

vassas01@nyumc.org

EDUCATION

1977 High School Diploma – McCallum High School Austin, TX

1980 Bachelor of Science Biology, Honors – University of Texas, Austin, Texas

1984 Doctor of Medicine - University of Texas, Houston, Texas

POST DOCTORAL TRAINING

Residency

1984- 1987 - Emergency Medicine, Wayne State University, Detroit Receiving Hospital, Detroit Michigan

Fellowship

1987- 1989 – Medical Toxicology, New York University School of Medicine / Bellevue Hospital Center, New York City Regional Poison Control Center, 455 First Ave., New York New York

LICENSURES AND CERTIFICATION

Licensure

1984 Texas State Medical License, #G9001

1987 New York State Medical License, #170778

2001 California State Medical License, #C50674

Board Certifications

1984 Federal Licensure Examination

1988 Diplomate, American Board of Emergency Medicine

1989 Diplomate, American Board of Medicine Toxicology

1995 Diplomate, American Board of Emergency Medicine With Subspecialty Certification in Medical Toxicology

2004 Medical Toxicology Subspecialty Recertification

2008 Diplomate Recertification, American Board of Emergency Medicine

Other Certifications

Basic Life Support

Advanced Cardiac Life Support

Pediatric Advanced Life Support

American Heart Association Instructor



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ACADEMIC APPOINTMENTS

September 2009 Clinical Associate Professor of Emergency Medicine, NYU School of Medicine / Bellevue Hospital Center, New York, New York

1994 to August 2009 – Clinical Assistant Professor of Emergency Medicine, NYU School of Medicine / Bellevue Hospital Center, New York, New York

1993 - Instructor in Clinical Medicine (Emergency Medicine), NYU School of Medicine / Bellevue Hospital Center, New York, New York

HOSPITAL APPOINTMENTS

Present: Emergency Service Partners / University Medical Center Brackenridge –Seton and Dell Children's Hospital Attending Physician

1989 to Present - Attending Physician Emergency Medicine Bellevue Hospital Center and Tisch Hospital, NYU School of Medicine, NY, NY

2003 to Present - Attending Physician Emergency Medicine Veterans Administration Hospital, NY, NY

AWARDS AND HONORS

- 1991 Fellow, American College of Emergency Physicians
- 1997 Fellow, American College of Medical Toxicology
- 2003 Fellow, New York Academy of Medicine

MEMBERSHIPS, OFFICES, AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES

Memberships

- 1989 American Academy of Clinical Toxicology
- 1989 American College of Medical Toxicology
- 1991 American College of Emergency Medicine
- 2003 Society for Academic Emergency Medicine
- 2007 American Correctional Association
- 2012- Association of Clinical Documentation Improvement Specialists
- 2013- American Case Management Association
- 2013- New York State Medicare Carrier Advisory Committee

Offices

1999 – 2002 – Women's Sports Foundation Advisory Board and Research Council

2000 - New York State Office of Professional Medical Conduct Consultant

Committee Assignment

2007 - 2011 American Board of Emergency Medicine, Oral Board Examiner

EDITORIAL POSITION: REVIEWER

1987 - 1989, American Academy of Clinical Toxicology Updates

1994 - Annals of Emergency Medicine

1995 - Journal of Toxicology / Clinical Toxicology

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1999 - Intensive Care Medicine

2011 - American Journal of Public Health

PRINCIPAL CLINICAL AND HOSPITAL SERVICE RESPONSIBILITIES

Clinical

1989 to present: Supervise patient care, provide administrative and clinical oversight in the Bellevue Emergency Department and teach medical students and residents from all specialties.

Hospital Service

1999 to present: Office of Public Affairs, Expert in Emergency Medicine, NYU School of Medicine 1989 to present: Office of Public Relations, Expert in Emergency Medicine, Bellevue Hospital Center

MAJOR ADMINISTRATIVE RESPONSIBILITIES

1995 - 1996 - Director, Medical Toxicology Fellowship Program, NYU School of Medicine , NYC Regional Poison Control Center, NY, NY

2012- present; - Physician Advisor for Case Management Bellevue Hospital Emergency Services

TEACHING EXPERIENCE

Local

- March 1988 Bellevue Hospital and New York City Regional Poison Control Center Emergency Medicine Seminar: Non-Opioid Analgesics.
- April 1988 Bellevue Hospital and New York City Regional Poison Control Center Emergency Medicine Seminar. Lecture: "Mushrooms."
- May 1988 New York Hospital / Cornell School of Medicine Flight Team. Lecture: "Helicopter Transport of the Poisoned Patient."
- May 1988 Bellevue Hospital and New York City Regional Poison Control Center Emergency Medicine Seminar. Lecture: "Solvent Toxicity: Has My Patient Been Exposed?"
- June 1988 New York University Medical Center / Bellevue Hospital, Emergency Medicine Board Review Course, Lecture: "Recent Advances in Hypothermia Management."
- March 1988 to November 1988 New York University Medical Center / Bellevue Hospital Twenty-Two-Week Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- August 1988 New York University Medical Center, Department of Internal Medicine Conference Series.
 Lecture: "Hyperthermia."
- March 1990 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy. An Intensive Review in Clinical Toxicology. Lectures on: "Calcium Channel Antagonists," "B-blockers," and "Digoxin."
- October 1988 New York University Medical Center, Postgraduate Medical School, and Bellevue Hospital, Emergency Services, Fifth Annual Five Day Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- June 1990 New York University Medical Center, Postgraduate Medical School, 10th Annual Emergency Medicine Seminar. Lectures: "Evaluation of Penetrating Trauma," "Orthopedic Assessment and Casting," "Airway Management," and "Trauma Case Studies."
- March 1991 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, An Intensive Review in Clinical Toxicology. Lectures on: "Chemical Toxins."

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- March 1991 to November, 1991 New York University Medical Center / Bellevue Hospital Twenty-Two-Week Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- August 1991 Metropolitan Hospital / New York Medical College, Emergency Medicine, Grand Rounds. Lecture: "Hyperthermia."
- October 1991 New York University Medical Center, Postgraduate Medical School, and Bellevue Hospital, Emergency Services, Sixth Annual Five-Day Emergency Medicine Board Review Course. Lecture: "Environmental Emergencies."
- March 1992 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy. An Intensive Review in Clinical Toxicology, Lectures: "Biological Hazards" and "The Patient with an Arrhythmia."
- June 1992 New York University Medical Center, Postgraduate Medical School, 11th Annual Emergency Medicine Seminar. Lectures: "Resuscitation from Traumatic Arrest," "Heat-related Disorders," and "Orthopedic Assessment and Casting."
- March 1992 New York University Medical Center, Postgraduate Medical School. Course Director, One-day Seminar, Lecture: "Orthopedic Assessment for the Emergency Physician."
- March 1993 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, an Intensive Review in Clinical Toxicology. Lectures: "Drugs of Abuse" and "Toxic Alcohols."
- 1992 to 1994 New York University Medical Center, Postgraduate Medical School Emergency Medicine Residency Program. Lecture Series: "Procedures in Emergency Medicine."
- March 1994 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, an Intensive Review in Clinical Toxicology. Lecture: "Hydrofluoric Acid."
- June 1994 New York University Medical Center, Postgraduate Medical School, 14th Annual Emergency Medicine Seminar. Lecturers: "Chest Pain and the Deformed Steering Wheel," "Pediatric Trauma," and "Hand Evaluation: An Intensive Minimodule."
- June 1994 New York University Medical Center, Bellevue Hospital, Department of Pediatrics and Emergency Services. Pediatric Emergency Medicine Lecture: "Environmental Emergencies."
- September 28 / October 2, 1994 Essential Topics in Emergency Medicine, presented by ACEP, Washington, D.C. Lectures: "Management of the Overdosed Patient," "Street Drugs," "Analgesic Drug Toxicity," and "Envenomations."
- March 1995 New York City Regional Poison Control Center in conjunction with Bellevue Hospital Emergency Services and St. John's University School of Pharmacy, an Intensive Review in Clinical Toxicology. Lecture: "Special Concerns in Pediatrics."
- May 1995 New York University, Bellevue Hospital Center Department of Pediatrics. Pediatric Emergency Medicine Review. Lecture: "Summertime Environmental Dangers."
- 1995 New York University Medical Center Postgraduate Medical School. 15th Annual Emergency Medicine Seminar. Lectures: "Critical Decisions Regarding the Diagnosis and Management of Hypo- and Hyperthermia" and "Hand Evaluation."
- July 8, 1996 Grand Rounds: Brooklyn Hospital Center Internal Medicine and Emergency Medicine. "Heat Illness, Pathophysiology and Treatment."
- March 12 to 13, 1998 New York Regional Poison Control Center, Bellevue Hospital Center. An Intensive Review in Clinical Toxicology. "Natural Toxins."
- June 2 to 4, 1999 NYU School of Medicine / Bellevue Hospital Department of Emergency Medicine.
 Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach. How are Hypothermic Patients Best Rewarmed?

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- March 9, 2000 Lutheran Medical Center Internal Medicine Grand Rounds, New York, NY. "Sports Toxicology."
- March 9, 2000 An Intensive Review Course in Clinical Toxicology, New York City Poison Control Center and Bellevue Hospital Center: "Sports Toxicology" and "Snakes and Spiders."
- April 13, 2000 Lutheran Medical Center Internal Medicine Grand Rounds, New York, NY. Lecture: "Snakes and Arthropods."
- June 2 to 4, 2000 NYU School of Medicine / Bellevue Hospital Department of Emergency Medicine. Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach, Lecture: "Fomepizole: When should it be used?"
- June 7, 2001 –Bellevue Hospital Department of Emergency Medicine 21st Annual Emergency Medicine Seminar. Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach. Lecture: "Medical Complications of Marathons."
- March 7 to 8, 2002 New York Poison Control Center and Bellevue Hospital Center: An Intensive Review Course in Clinical Toxicology. "Sports Toxicology."
- June 5, 2003 NYU Department of Emergency Medicine 23rd Annual Emergency Medicine Seminar.
 Contemporary Concepts in Clinical Emergency Medicine: A Literature-based Approach. "The Pain of Prisoners: Health Care Behind Bars."
- March 3, 2005 American College of Emergency Physicians and the Section on Emergency Medicine. New York Academy of Medicine. Lecture: "Life in Emergency Medicine."
- April 1, 2005 New York University School of Medicine. Orthopedic Injuries: Clinical Management and Controversies. "Pediatric Fracture Patterns in Child Abuse."
- March 9 to 10, 2006 New York City Poison Control Center and Bellevue Hospital Center. An Intensive Review Course in Clinical Toxicology. "Sports Toxicology Workshop."
- March 30, 2006 Office of the Chief Medical Examiner, New York City: "Trauma in the Living."
- April 7, 2006 NYU School of Medicine: The Orthopedic Manifestations of Child Abuse.
- August 3 to 7, 2006 NYU School of Medicine Emergency Medicine Review Course: "Environmental Emergencies."
- Advanced Science Seminar, NYU School of Medicine Medical Student Lecture Series August 2008: Sports Toxicology.
- March 8 to 9, 2007 Bellevue Hospital Center / NY Regional Poison Control Center: An Intensive Review Course in Clinical Toxicology. Lectures: "Hyperthermia Syndromes" and "Sports Toxicology Workshop."

National Lectures

- 1994 ACEP Scientific Assembly, Orlando, Florida. Lectures: "Antidepressant Overdose," "Case Studies in Medical Toxicology," and "Heat Stroke and Heat-related Disorders
- November 1988 Johns Hopkins Medical Institutes, Department of Emergency Medicine, Baltimore, Maryland.
 Written Boards in Emergency Medicine, A Comprehensive Review. Lecture: "Environmental Emergencies."
- September 1991 San Francisco General Hospital / UCSF / Division of Emergency Medicine, Grand Rounds. Lecture: "Penetrating Trauma."
- June 1993 University of Texas at Houston, Department of Emergency Medicine, Houston, Texas, Grand Rounds. Lecture: "Acute Salicylate Toxicity."
- May 15 to 19 1994 Essential Topics in Emergency Medicine, Presented by ACEP, New Orleans, Louisiana.
 Lectures: "Management of the Overdosed Patient: The First Thirty Minutes," "Street Drugs," "Envenomations," and "Analgesic Drug Toxicity."
- March 20 to 24, 1995 Society for Academic Emergency Medicine, Annual Meeting, San Antonio, Texas. Case Presentation Competition Discussant, Northeast Region.

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- September 1995 1995 ACEP Scientific Assembly, Washington, D.C. Lectures: "Difficult Issues in Pediatric Trauma: They're Not Just Little Adults," "Case Studies in Medical Toxicology," and "Snake and Arthropod Bites."
- April 1995 Brooke Army Medical Center Emergency Medicine Department, San Antonio, Texas. Grand Rounds. Lectures: "Iron Poisoning" and "Drugs of Abuse."
- April 15, 1997 University of Pennsylvania Medical Center Department of Emergency Medicine Grand Rounds: "Hypothermia."
- April 27 30, 1999 Women's Sports Foundation Annual Summit Meeting, Washington, D.C. "Sports Toxicology."
- April 3-5, 2000 American College of Emergency Physicians: Emergency Medicine Connection 2000, Marriott Marquis, NY, NY 1. Pure Poison 2000 2. Case Studies in Toxicology
- Jan 14, 2000 Uniformed Services Emergency Medicine Residency Program / Brooke Army Medical Center, Fort Sam Houston, Texas. Grand Rounds. Lecture: "Hypothermia," "Case Studies in Toxicology," and "New Drugs of Abuse."
- September 17, 2000 North American Congress of Clinical Toxicology 2000, American Academy of Clinical Toxicology. "Metformin."
- December 6th, 2000 Southwestern Medical School Department of Emergency Medicine, Dallas, TX. Grand Rounds. Lecture: "Hypothermia."
- February 7 to 11, 2004 Rocky Mountain Winter Conference on Emergency Medicine. Grand Rounds. Lecture: Winners and Losers: The Toxicology of Performance Enhancement. Colorado Chapter, ACEP. Copper Mountain, Colorado.
- February 25, 2004 Southwestern Medical School Department of Emergency Medicine and Dallas Poison Control Center. Winners and Losers: The Toxicology of Performance Enhancement.
- July 8, 2004 Wayne State University School of Medicine / Department of Emergency Medicine Keynote Speaker, Detroit, Michigan. "Thermoregulatory Disorders in the Emergency Department."
- March 15-17, 2007 American College of Medical Toxicology 5th Annual Spring Course, Miami, FL. Lecture:
 "Out of Bounds: The Science and Toxicology of Testing Athletes."
- April 13-16, 2008 American College of Occupational and Environmental Medicine. American Occupational Health Conference, New York, NY. Invited Speaker: "The Toxicology of Testing in Sports."
- March 7 8th, 2008 Invited Panelist Fordham Law School, New York City. The Lethal Injection Debate: Law and Science. Physician Participation in Lethal Injection. Co-panelists: Gregory Curfman, M.D., Executive Editor, New England Journal of Medicine, Stephen Morrissey, PhD Managing Editor, New England Journal of Medicine and Jonathan Groner, M.D. Ohio State University. Lecture: "The Pharmacology of Lethal Injection."
- March 3, 2009 Fordham Law School Criminal Law Workshop, "Medical Care of Inmates," Invited scholar by Professor Deborah Denno and Arthur A. McGivney, Professor of Law.
- October 25th, 2011: Fordham Law School: Neuroscience and the Law. Ethanol Intoxication, Withdrawal and Tolerance and the Legal Limit
- November 1, 2011 American Public Health Association: Moderator: The FDA and Public Health: Improving Scientific Integrity, Safety, and Quality of Medical Products
- November 2-5, 2011 Children's Hospital of Philadelphia: Pediatric Emergency Medicine in Historic Philadelphia: Pediatric Toxicology
- November 27, 2012 Fordham Law School: Law and Neuroscience Speakers Series 2012. "From the Bellevue Hospital Emergency Department; The Science of Intoxication, Tolerance and Withdrawal".

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International Lectures

- October 2-25 1997 14th Annual Scientific Conference, L'Association des Medecins d'Urgence du Quebec, Quebec City, Quebec. Lecturer. "Street Drug Intoxications," "Cocaine Toxicity," and "Clinical Cases in Toxicology."
- May 22 to 25, 2002 European Association of Poisons Centres and Clinical Toxicologists XXII International Congress, Lisbon, Portugal. "Toxicologic Effects on Thermoregulation."
- November 18 to 20, 2004 NYU Department of Emergency Medicine and the Department of Emergency Medicine, Tirgu Mures, Romania. Pediatric Emergency Medicine Course: "Pediatric Toxicology and Pediatric Thermoregulation."
- February 10 to 11, 2007 Rajavithi Hospital, Bangkok, Thailand. Advanced Training in Emergency Medicine.
 "The Management of Trauma."
- June 21, 2011: San Miguel de Allende, Mexico: The Symposium on Resusciation. Sociedad Mexicana de Medicine de Emergencia; / International Federation of Emergency Medicine: "Lipid Emulsion Infusion in Acute Overdose"

TEACHING AWARDS RECEIVED

2002-2003— Clinical Attending Physician of the Year, NYU - Bellevue Emergency Medicine Residency Program 2005-2006 – Clinician of the Year, NYU -Bellevue Emergency Medicine Residency Program

MAJOR RESEARCH INTERESTS

Thermoregulation: Hyperthermia and Hypothermia

Drugs and Effects on Temperature

Prisoner rights: Access to appropriate health care in prison

Conditions of confinement and temperature

Drug effects on temperature regulation in prisoners

Lethal Injection: Medical toxicology of the three drug protocol

Thiopental in lethal injection

BIBLIOGRAPHY

Original Reports

- Vassallo, SU and Delaney, KA: "Pharmacologic effects on thermoregulation: Mechanisms of drug-related heatstroke," Clin Toxicol 1989; 27; 4 199-224.
- Delaney, KA, Howland, MA, Vassallo, SU and Goldfrank LR: "Assessment of acid-base disturbances in hypothermia and their physiologic consequences," Ann Emerg Med 1989;18;72-77.
- 3. Brown J, Hoffman RS, Aaron CK, Vassallo S: Theophylline toxicity. Ann Emerg Med 1989;18:425-426.
- Vassallo, SU, Khan, A, Howland, MA: "Use of the Rumack-Matthew nomogram in cases of extended-release acetaminophen toxicity." Ann Intern Med 1996;125:940.
- Vassallo S, Delaney K, Hoffman R, Slater W, Goldfrank L: "A prospective evaluation of the electrocardiographic manifestations of hypothermia." Acad Emerg Med 1999;6:1121-1126.
- 6. Vassallo, S, Hartstein, M, Howard, D and Stetz, J.: "Traumatic retrobulbar hemorrhage: emergency decompression by lateral canthotomy and cantholysis," *J Emerg Med* 2002;22: 251-256.
- 7. Delaney, KA, Vassallo, SU, Larkin, GL, Goldfrank, LR: "Rewarming rates in urban patients with hypothermia: prediction of underlying infection," *Acad Emerg Med* 2006;13:913-921.
- 8. Vassallo, SU: "Thiopental in lethal injection," Fordham Urban Law Journal, Vol. 35 p. 957-964, June 2008.

SUSI U. VASSALLO, M.D.

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 Chen BC, Vassallo SU, Nelson LS, Hoffman: Stress Cardiomyopathy induced by Acute Cocaine Toxicity Curr Clin Pharmacol 2012;6:1-11.

Reviews, Books, and Book Chapters

- Delaney, KA, Vassallo SU, Goldfrank LR. "Hypothermia and Hyperthermia," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) Goldfrank's Toxicologic Emergencies, Fourth Edition, Appleton-Lange-Crofts, Norwalk, CT 1990.
- 2. Vassallo SU, "Cocaine" in Tintinalli, Krome and Ruiz, (eds.) "Emergency Medicine: A Comprehensive Study Guide, Third Edition, McGraw-Hill, 1992.
- 3. Delaney, KA, Vassallo, SU, Goldfrank LR, "Thermoregulatory Principles," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies, Fifth Edition*, Appleton-Lange, Crofts, 1994.
- Bruno, R and Vassallo, S., "Sedative Hypnotics," Emergency Toxicology, 2nd edition, Editor Vicellio, P. Lippincott-Raven, 1998.
- Vassallo, S and Delaney, K, "Thermoregulatory Principles," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) Toxicologic Emergencies, 6th edition, Appleton-Lange, Crofts, 1998.
- Vassallo, S., "Essential Oil Toxicity," Clinical Toxicology, Ford, M., Delaney KD, Ling LJ, Erikson, T.(eds.) Saunders, WB, 2001.
- 7. Vassallo, S: "Sports Toxicology" and "Thermoregulatory Principles,"," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies, 7th edition,* Appleton-Lange, Crofts, 2002.
- 8. Vassallo, S and Delaney, KA, "Thermoregulatory Principles,"," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) *Goldfrank's Toxicologic Emergencies, 8th Edition McGraw-Hill, 2006.*
- 9. Vassallo, S, "Athletic Performance Enhancers,"," In Goldfrank LR, Flomenbaum NE, Lewin NA, et. al. (eds.) Goldfrank's Toxicologic Emergencies, 8th edition, LR, McGraw-Hill, 2006.
- Vassallo, S: Chapter 7: Environmental Emergencies. In Naderi, S., Park R (eds.) Intensive Review for the Emergency Medicine Written Boards. McGraw-Hill, 2009

Educationally Relevant Publications

- 1. Vassallo, S., "Treatment of Methanol Intoxication." Hospital Pharmacy Hotline, Vol. 1 No 10, 1988.
- 2. Vassallo S., "Hypothermia," Audio Digest, Volume 7, Number 5, March 1, 1990.
- Vassallo, S., "Clinical Challenges in Emergency Medicine: Nausea, Vomiting, Vertigo and Drug Overdose," Continuing Education Material Sponsored by Albert Einstein College of Medicine and Montefiore Medical Center. December 2001.

Abstracts

1988 AAPCC/AACT/ABMT/CAPCC Annual Meeting, Baltimore, Maryland.

• Service dichromate poisoning: Survival after hemodialysis. Vassallo, SU and Howland, MA.

1998 American Association of Poison Control Centers Meeting.

Passion and Poison in the World's Great Opera. Platform presentation September 1998, Orlando FL.

CIVIL RIGHTS

2010-2012 Department of Homeland Security – Nongovernmental Organization Medical Advisory Group: Policy and procedures development for the ICE Health Service Corps (IHSC) for delivery of health care to individuals in US Immigration and Customs Enforcement (ICE) or U.S. Customs and Borders Protection (CBP) custody.

Prisoner Rights and Health Care

Volunteer Medical Expert in the following Class Action Litigation Cases:

Russell et al vs. Mississippi Civil No. 1:02CV261 D D Feb 14, 2003 in the United States District Court for the Northern District of Mississippi, Eastern Division, in the case of the Death Row Class Action Lawsuit: Willie Russell, et al., v. Robert Johnson, et al, 1:02CV261-D-D.

 Expert in this case on behalf of the ACLU's Margaret Winter, Associate Director of the ACLU National Prison Project. Written declaration and testimony in Federal Court, Oxford Mississippi.

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July 22, 2013

Angola Litigation

Compensation for Susi Vassallo M.D.

Report Writing \$350 / hour

Testimony \$500 / hour

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF TEXAS HOUSTON DIVISION

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Plaintiffs' Consolidated Summary Judgment Response Appendix

EXHIBIT 53

November 12, 2013

Expert Opinion in Stephen McCollum et al v. Brad Livingston Susi Vassallo, M.D.

My name is Susi Vassallo, M.D. I am a physician licensed to practice Medicine in Texas and New York State. I am Board Certified in Emergency Medicine and Medical Toxicology. I am an expert on thermoregulation and the consequences of extreme heat on people. My curriculum vitae, fee schedule, and list of testimony for the previous four years are attached. I have been retained by Edwards Law and the Texas Civil Rights Project to review the records in the case of Stephen McCollum et al. v. Brad Livingston Civil Action No. 312-CV-020307.

Documents Reviewed

TDCJ Hutchins State Jail Dorm Roster 7/21/2011

TDCJ Hutchins State jail Offender Statement from C7 2011

TDCJ Hutchins State Jail rap sheet

TDCJ Hutchins State jail photo and ID roster

TDCJ extreme heat precautions operational procedures Hutchins unit April 15, 2012

Office of the Medical Examiner Autopsy Report 7/29/2011

Temperature Logs from Hutchins summer 2011

Heat Grievances

Medical records Mr. McCollum of TDCJ

Medical Records of UTMB Managed Care Jan 12, 2004

Parkland Hospital Intensive Care medical records

Office of the Inspector General Report

Defendants' supplemental responses

UTMB drug formulary

Texas Deaths in Prison records of 2011, including Emergency Action Center reports and Office of the Inspector General investigations performed after men died of hyperthermia

Site Visit to Hutchins Jail

City of Hutchins Ambulance Record Incident 11-573 on 7-22-2011

Billing Records of Hutchins EMS transport in incident 11-573

McLennan County Jail Records

Heat warning documents posted at Hutchins Unit

McLennan County Sheriff's Office Health Services Division Medical Records

Report of Prof. James Balsamo

Depositions of Ananda Babbili, Robert Eason, Jeff Pringle, Richard Clark, Karen Tate,

Sandrea Sanders, Owen Murray, and Glenda Adams

Depositions of Stephanie Kingery, Stephen McCollum, and Sandra McCollum

McCollum's Medication Administration Record

Temperature extremes in the TDJC workplace policy

Medical record review

Mr. McCollum was a 58-year-old male with a medical history of hypertension, diabetes, major depressive disorder, arthritis, and back injury. As early as December 4, 2003 he was noted to have hypertension with a blood pressure of 184/88. On July 15, 2011, upon his transfer from McLennan County Jail to the Hutchins Unit, Mr. McCollum was noted on the Texas Uniform Health Status Update to have a history of hypertension. No blood pressure or other vital signs are recorded; the spaces are left blank. There is no evidence that a physical exam, except for weight and height, was performed. Mr. McCollum did, however, report a personal history of diabetes to a nurse performing an initial triage. Mr. McCollum's weight was 330 lbs. and his height 5 feet 10 inches. He was morbidly obese. On that date the record reflects that Physician Assistant Babbill gave a verbal order to stop clonidine and to start Mr. McCollum on the diuretic hydrochlorothiazide 25 mg every day.

Blood and urine tests were obtained from Mr. McCollum on July 20, 2011 at 8:42 am. The lab received the specimens on July 20th at 23:40pm and reported the results on July 21 at 8:43am approximately 20 hours before the collapse of Mr. McCollum. The test results were notable for a blood glucose elevation of 130 and an elevated hemoglobin A1C at 6.2, which is concerning with his reported history of diabetes. The serum white blood cell count was elevated at 13.1. His urine was concentrated and cloudy and showed signs of infection including more than 30 white blood cells, hyaline casts, trace ketones, and a specific gravity of 1.028. The serum electrolytes were abnormal including a sodium equal to 133, the chloride of 91. The BUN was 31 and the creatinine was 1.67. The carbon dioxide was 18 and the anion gap was elevated at 24. These blood and urine results are consistent with and indicate that Mr. McCollum was suffering from dehydration and infection.

Other prisoners noted in their statements that Mr. McCollum was not eating or drinking in the time prior to his collapse in heatstroke.

Human bodies dissipate heat by vasodilation and evaporative cooling through sweating. High relative humidity limits evaporation, and limits heat loss. The body temperature begins to rise, increasing the risk of heat-related illnesses.

It is well known that certain medical conditions, including hypertension, diabetes, and obesity, along with other factors like age, increase the body's intolerance to heat.

Temperatures in the C-7 dorm at the Hutchins Unit

Mr. McCollum was housed in the C-7 dorm. Random samplings of temperatures reflected a 2 to 3 degree difference between the inside and outside temperature in the dorm. (TDCJ Risk Management department inter-office communication date July 13,2011). On July 13 at 2pm the temperature inside C7 was 101^{0} F. The outside

temperature was 104° F with 48% humidity and the heat index is 123° F outside. On July 22 at 7:45 am a few hours after Mr. McCollum's transport to Parkland, the temperature was 86° F degrees inside of C-7. The temperature outside was 84° F with 68% humidity. According to Mr. James Balsamo's report and the records available to me, the indoor heat index was over 100 every day Mr. McCollum was housed at the Hutchins Unit, and at times the heat index indoors likely exceeded 120. Additionally, TDCJ records indicate heat index levels in excess of 135 on multiple occasions in the days before Mr. McCollum died.

Visit to Hutchins Unit Jail September 23, 2013

I was accompanied by Warden Jeff Pringle, Mr. Jay Eason, Deputy Director of Texas Department of Criminal Justice, and other corrections officers and staff, State of Texas Assistant Attorneys General Mr. Matt Greer and Mr. Jonathan Stone and attorney Mr. Scott Medlock and Mr. Jeff Edwards.

C-7 Unit Bunk 46 is one of the upper bunks in a dormitory style setting designed to house 58 men. Because it is the top bunk, Mr. McCollum, a large obese man lying in the bunk, would have been visible from the officers' station. In addition Mr. McCollum's bunk was then and is now under observation by video camera connected to a video monitor in the Officers Station. Warden Pringle confirmed that corrections officers making rounds enter the housing area and are not separated from inmates by bars or other barriers once inside. Officers walk in direct proximity to inmates and may speak to, touch, shake or otherwise rouse the inmates. Given this physical access and proximity, the unresponsiveness of an inmate can be ascertained and further assessed. Other inmates noted that Mr. McCollum did not leave his bunk to eat and was not able to show his identification card to the correction officer on rounds, necessitating another inmate do this for him. These methods of observation of Mr. McCollum presented critical opportunities to intervene and prevent his death by heatstroke. Mr. McCollum was not normally responsive or active due to life -threatening illness. Again the opportunities to prevent death were several fold; by observation by video of Mr.

McCollum's lack of engagement in the activities of daily living, such as eating and interacting, and by direct contact with corrections officers. Mr. McCollum was unresponsive to an identification security check. Other inmates were in proximity and had noted Mr. McCollum had not left his bed and seemed ill.

When I was at the prison, I observed several signs titled "Recognition of Heat Illness" a document regarding the risk of heat illness. These were posted in areas where correction officers had access; these areas included the property and intake areas outside of the holding cells. Because the signs were posted outside of the prisoner holding area a prisoner would not be able to stand and read the sign. Perhaps the signs were placed there as part of the effort to educate corrections officers to the dangers of heat illness at the Hutchins Unit. (Of course, from visiting the prison on this date I could not tell if these signs were posted when Mr. McCollum was in the prison or not.)

I also observed one ten-gallon jug in the C-7 dorm for water in the summer.

According to testimony I reviewed, the jugs were supposed to be refilled three times per day during the summer.

Many parts of the prison that we visited were air conditioned – like the administrative building, the infirmary, and the intake building.

Even though we visited the prison in early fall, it was noticeably warm inside the dormitory where Mr. McCollum was housed. It would be dangerously hot for anyone, especially for someone with Mr. McCollum's conditions, in July. It was obvious that the building was not air conditioned, and that the temperatures could not be mechanically raised or lowered, according to the American Correctional Association standards.

I observed the parts of the prison where prisoners are brought into the prison system, and processed into the prison.

Opinions

Mr. McCollum died of heatstroke because of his medical conditions and the extreme temperatures in which he was incarcerated and because officers ignored his lifethreatening heat stroke, and delayed life-saving treatment or transport to a hospital for more than an hour. His death was entirely preventable. The inhumane temperatures in the cell led directly to his death by heatstroke.

- 1. Heat stroke is a true medical emergency. When a patient begins to suffer a heat stroke, they must immediately receive medical treatment or they are put at increased risk of death or serious injury. Survival is possible if cooling measures are rapidly instituted. It is well known that heat stroke can cause death and each of the Defendants and TDCJ and UTMB training materials acknowledged heat stroke is a medical emergency. Death is a potential consequence of heat stroke identified in TDCJ and UTMB's training materials.
- 2. Mr. McCollum was at markedly increased risk of heat stroke under the conditions at the Hutchins Unit due to his medical conditions. These medical conditions put Mr. McCollom at increased risk of heatstroke and death.
- 3. Diuretics such as the hydrochlorothiazide prescribed for Mr. McCollom also increased his risk of heat stroke. Diuretics remove water from the body to decrease blood pressure. Diuretics impair the ability of the heart to increase cardiac output due to dehydration. Diuretics increase a patient's risk of heatstroke by causing dehydration and impairing cooling. Dehydration substantially increases a patient's risk of heat stroke.
- 4. Diabetes would also put Mr. McCollum at increased risk of heat stroke. Diabetes is a chronic disease caused by an insulin imbalance. It is a medical condition that impairs the ability of the cardiovascular system to cool the body. Among other effects, diabetes impairs the body's ability to cool by limiting cardiac output, vasodilation and sweating. These functions are critical to help cool the body during periods of heat. It is my opinion that,

- more likely than not, Mr. McCollum was diabetic based on his reported personal medical history, morbid obesity and lab results
- 5. Mr. McCollum was morbidly obese. His body mass index was greater than 40. His obesity likely limited his ability to walk, stand, and breathe, and certainly prevented him from climbing up and down from the top bunk when he was ill. People who are morbidly obese are more likely to suffer from cardiac diseases, diabetes, and heatstroke.
- 6. Mr. McCollum was at increased risk of heat stroke due to his age, hypertension, diabetes, obesity, and general physical condition. These observations are consistent with TDCJ and UTMB policies that identify medical conditions predisposing patients to heat stroke.
- 7. In the hours prior to his discovery in extremis, Mr. McCollum was unable to move or respond to corrections officers. Because of this, for example, Mr. McCollum's bunkmate presented Mr. McCollum's identification to officers checking on prisoners. The fact that corrections officers did not further assess Mr. McCollum until he was reported to be having "seizures" contributed to the delay in his care and to his death from heatstroke.
- 8. Cooling measures should have been immediately begun upon the discovery of Mr. McCollom unconscious and suffering seizures in his bunk. These measures should have included taking him to an air conditioned part of the prison such as the infirmary, wetting down his body, blowing fans onto his wet body and clothes and or packing his body with ice. This delay in cooling was a proximate cause of Mr. McCollum's death.
- 9. Mr. McCollum was discovered having seizures at 2:10am. The ambulance record shows the ambulance was not dispatched until 3:05 am, 55 minutes after the discovery of Mr. McCollum suffering convulsions, hot to the touch, and non-responsive. The ambulance personal reported the initial patient contact at 3:23 am. This delay in activating EMS contributed to Mr. McCollom's death from heatstroke. To a reasonable degree of medical certainty, it is more likely than not that Mr. McCollum would have survived if he was provided prompt first aid (such as taking him to the air conditioned

- infirmary, packing his body with ice, or wetting down his body and blowing fans on his wet body), or if he was provided with immediate care from a medical professional.
- 9. When a patient is non-responsive and convulsing, he requires immediate medical attention. Under no circumstances should treatment be delayed "until morning," as is described as the routine practice at the Hutchins Unit for prisoners suffering "seizures" at night. These symptoms are a medical emergency. Failure to immediately secure medical treatment for someone with these symptoms ignores an obvious, serious medical need, and is entirely unreasonable, and shows indifference to a serious medical need.
- 10. Failure to provide around-the-clock medical staff at a facility where people known to be vulnerable are housed in conditions known to be dangerous is extremely dangerous, and denies people access to potentially life-saving medical care.
- 11. The decision to house Mr. McCollum in the top bunk likely delayed his access to first aid and EMS. Because the officers could not lift Mr. McCollum off the bunk, they could not take him to an air-conditioned part of the prison while awaiting EMS. Likewise, when EMS arrived, transferring him from the bunk to the ambulance likely delayed necessary medical treatment. Finally, it would be more difficult for a person with obesity, like Mr. McCollum, to get up and down off the bunk to access water and showers, the measures available in the prison.
- 12. Mr. McCollum was at medically high risk for heat illness given his history of cardiovascular disease and obesity and the medications he was taking.
- 13. Mr. McCollum was sick for two days prior to his collapse. His laboratory values were abnormal and confirm the illness that surrounding prisoners described in their written descriptions. Yet he received no actual medical treatment or care. A review of his history, laboratory values and physical findings would have indicated he was at increased risk of heat stroke due to dehydration, underlying medial illness and infection.

- 14. Mr. McCollum did not receive a physical exam at any time during his incarceration at the Hutchins Unit. A physical exam would have likely identified his serious medical problems complicated by the extreme heat.
- 15. It is medically necessary to provide a person with Mr. McCollum's medical conditions, or someone prescribed his medications with his underlying conditions, access to air conditioning (or other cooling mechanisms, like misters) for at least part of the hottest days of the year to eliminate the risk of heat stroke. When temperatures exceed 100 degrees indoors, people with Mr. McCollum's medical conditions must receive some opportunity to cool off or they are put at grave risk of heat stroke. No competent medical provider could reasonably believe housing people with Mr. McCollum's medical conditions in apparent temperatures over 100 would not put patients at grave risk. Housing people with these medical conditions in these temperatures is extremely dangerous.
- 16. Several reasonable accommodations would have likely saved Mr. McCollum's life.
 - a. Housing Mr. McCollum in an air-conditioned portion of the prison, or assigning him to a prison that was air conditioned.
 - b. Allowing and instructing Mr. McCollum to spend a few hours per day in an air-conditioned portion of the prison.
 - c. Assigning Mr. McCollum to a bottom bunk.
 - d. Providing Mr. McCollum immediate medical attention when he began to suffer convulsions and became unresponsive, including taking him to an air-conditioned part of the prison, wetting down his body, and packing his body with ice.

These measures are all reasonable and medically necessary for someone with Mr. McCollum' disabilities.

17. The measures TDCJ and UTMB take to protect prisoners from heat stroke are obviously medically inadequate, do nothing to bring down the temperature, are inhumane for all prisoners and officers working in these conditions, and endanger the lives of people like Mr. McCollum.

- a. Cold water cold water is necessary to help cool the body during periods of extreme temperature. The signs posted in the prison suggest drinking 2 gallons of water a day on the hottest days. Drinking that much water would have been very difficult for Mr. McCollum because it would require him to constantly get up and down off his top bunk, and he had no cup to hold even the tap water from the sink.
- b. Fans fans merely recirculate hot air. This has little to no medical benefit for people exposed to extremely high temperatures.
- c. Limiting convict labor Mr. McCollum was not medically approved to work, and did not benefit from the policies limiting convict labor during extreme temperatures. Similar limits on housing vulnerable prisoners during periods of extreme temperatures are necessary to prevent deaths from heat stroke.
- 18. The conditions at the Hutchins Unit created a very high risk of heat stroke, especially for patients with Mr. McCollum's medical conditions.
- 19. I concur with the findings of the autopsy Mr. McCollum more likely than not died due to heat stroke due to lack of air conditioning.
- 20. The increased risk of heat stroke for patients with Mr. McCollum's medical conditions is basic medical knowledge, that any accredited doctor, physician's assistant, or nurse would know.
- 21. Before Mr. McCollum's death, he was likely in pain and suffering intensely from the extreme temperatures.

Summary

Mr. McCollum's death is a direct result of the extreme temperatures in his cell, inadequate monitoring of an inmate at risk for heatstroke, poor preparation of the Hutchins facility for heatstroke emergencies, delay in cooling and delay until transport by ambulance to Parkland Emergency Department. Mr. McCollum's death was preventable.

Susi Vassallo, M.D., FACEP, FACMT